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FOUNDRY  
CO. LTD.



LION CASTINGS

KIRKINTILLOCH  
NEAR GLASGOW

LION FOUNDRY CO., LTD.

# ILLUSTRATED CATALOGUE *of* CAST-IRON MANUFACTURES

VOLUME I  
SEVENTH EDITION

LION



CASTINGS

## LION FOUNDRY CO., LTD.

ARCHITECTURAL, STRUCTURAL AND ENGINEERING IRONFOUNDERS

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LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## PREFACE

IT is with pleasure that we present this, the Seventh Edition of our Catalogue illustrating the extensive range of our Cast-Iron products.

In producing this volume, an attempt has been made to compile a standard work of reference for the use of our many friends in the Architectural profession and in the Building and Plumbing trades.

We trust this new edition will prove to be as reliable a source of information as previous issues have been.

We continue to produce castings of the highest quality, and it will be seen that we have added considerably to the scope of our manufactures and are now making a wide variety of specialised industrial castings as used in the many branches of the Engineering Industry.

Our technical and sales departments are always at your service, and we are at all times willing to supply Architects and Engineers with technical information.

May we express the hope that this catalogue will stimulate and enhance the confidence placed in us for so long by our many customers.

LION FOUNDRY COMPANY LIMITED

# ALPHABETICAL INDEX

	Page		Page		Page
Access Doors	30, 31	Garden Seat Standards	163	Panels, Ventilating	101-104
Air Bricks	105-107	Gear Box	172	Panels, Window Breast	167-168
Angles, Gutter	71	Gratings, Continuous	109-119	Parallel Branches	25, 49
Anti-Splash Shoes	48	Gratings, Snow	72	Pavement Gutters	100
		Gratings, Surface	122-127	Pillars, Lamp	161, 162
Balcony Gullies	131	Gratings, Ventilating	101-104	Pipes, Rain-Water	42
Bellmouths	41	Grease Box Covers	127	Pipes, Soil	11-14
Bel-Trap Cesspools	129, 130	Guard Posts	158	Pipe Branches	21-28, 45-47
Bends	15-19, 44, 49	Gullies	131, 135	Pipe Ears	13, 14
Bollards	159, 160	Gully Traps	135	Pipe Stacks	9, 10
Boots	49	Gutter Brackets	71, 77-99	Plates, Surface	122-127
Boundary-Wall Gutters	96, 97	Gutter Connections	75, 76	Posts, Road	158
Box Gutters	94, 95	Gutter Grates	74		
Brackets, Cantilever	76, 147	Gutters, Pavement	100	Rail Standards	158
Brackets, Cistern	147	Gutters, Plans of	69, 70	Rain-Water Heads	50-68
Brackets, Gutter	75, 76			Rain-Water Pipes	42
Branches	21-28, 45-47	Half-Round Gutters	77, 78	Regent Traps	135
Branches, Multi-	39, 40	Heads	50-68	Roof Gullies	131
Branches, Parallel	25, 49	Holderbats, Cast-Iron	35		
Breast Panels	167, 168	Holdfast	41	S-Branch	38
Breeches Pieces	49	Hopper Outlets	73, 74	S-Traps	135
Bridge Parapets	2			Sanitary Connections	36-38
Bubble Caps	165, 166	Insats	43	Seat Standards	163
Bubble Trays	165, 166	Inspection Pipes	33	Shelters, Bus	169
Bus Shelters	169	Inspection Doors	30, 31	Shoes	34, 48
				Single-Stack Plumbing	39, 40
Cantilever Brackets	76, 147	Keel Blocks	164	Sockets, Loose	34, 36, 41
Cesspools, Bel-Trap	129, 130			Soil Pipes	11-14
Cesspool Boxes	128	Lamp Pillars	161, 162	Snow Gratings	72
Chequer Plates	118	Leak-proof Outlets	132-134	Spun Pipes	14
Cistern Brackets	147	Louvre Ventilators	108	Stairs, Spiral	155-157, 171
Coal Shoots	125, 127			Stairs, Straight	150-154, 170
Collars	34, 36, 41	Machine Frame	172	Standards, Rail	158
Connections, Sanitary	36-38	Manhole Covers	139-146	Standards, Seat	163
Connecting Pipes	36	Manhole Slop Irons	146	Steps	150-154
Convector End Tube Support	166	Moulded Gutters	80-89	Stop Irons	146
Curbs, Trench	120, 121	Multi-Branches	39, 40	Stop Cock Cases	136-138
				Stop-Ends, Gutter	71
Diminishing Pieces	32	North-Light Gutters	99	Surface Gratings	122-127
Drops, Gutter	71	Nozzle-Ends (Ornamental)	72	Swan Necks	20, 43
Dust Tray Covers	119	Nozzle Pieces	71		
				Traps	29, 135
Ears	13, 14	Offsets	20, 43	Trench Curbs	120, 121
Eaves Bends	49	O.G. Gutters	79, 83	Tub and Sink Brackets	147
Enriched Gutters	90-93	Outlets, Gutter	71, 73, 74	Tub and Sink Standards	149
		Outlets, Leak-proof	132-134		
Filter Press Plate	172	P-Branch	38	Union Clips	71
Fire Plug Boxes	146	P-Traps	135	Union Slip Piece	41
Fire Hydrant Boxes	146			Union Sockets	34, 36, 41
Frames and Covers Unit	144, 145			Unit, Frames and Covers	144, 145

# NUMERICAL INDEX

No.	Description	Page	No.	Description	Page	No.	Description	Page
1	Plain Half-Round Gutter	77	6	Pavement Gutter	100	13	Cast-Iron Gutter Bracket	76
1	Pavement Gutter	100	6	Hopper Outlet	74	13	Stop Cock Case	137
1	Rain-Water Pipe	42	6	Gutter Grate	74	13	Manhole Frame and Cover	142
1	B.S.S. Rain-Water Head	50	6	Stop Cock Case	136	13	Manhole Frame and Cover	142
1A	Hopper Head (Corner)	50	6	Manhole Frame and Cover	140	13	Manhole Frame and Cover	142
1	Hopper Outlet	73	6	Floor Drain	130	13	Manhole Frame and Cover	142
1	Gutter Grate	74	6	Curb for Trench	120	13	Manhole Frame and Cover	142
1	Stop Cock Case	136	6	Cast-Iron Gutter Bracket	76	13	Manhole Frame and Cover	142
1	Manhole Frame and Cover	139	6	Guard Post	158	13	Manhole Frame and Cover	142
1	Manhole Step Iron	146	Fig. 6	Bend (Access Door on Heel)	15	13	Manhole Frame and Cover	142
1	Bell-Trap Cesspool	129	7	Moulded Gutter	80	13	Manhole Frame and Cover	142
1	Curb for Trench	120	7	Hopper Outlet	74	13	Manhole Frame and Cover	142
Fig. 1	B.S.S. Pipes (Type "A" Socket)	11	7	Gutter Grate	74	13	Manhole Frame and Cover	142
2	Beaded Half-Round Gutter	77	7	Stop Cock Case	136	13	Manhole Frame and Cover	142
2	Pavement Gutter	100	7	Manhole Frame and Cover	141	13	Manhole Frame and Cover	142
2	B.S.S. Rectangular Rain-Water Head	50	7	Bell-Trap Cesspool	130	13	Manhole Frame and Cover	142
2	Hopper Outlet	73	7	Curb for Trench	120	13	Manhole Frame and Cover	142
2	Gutter Grate	74	7	Wringer Plate	148	13	Manhole Frame and Cover	142
2	Stop Cock Case	136	7	Guard Post	158	13	Manhole Frame and Cover	142
2	Manhole Frame and Cover	139	Fig. 7	Bend (with Access Door on Side)	15	13	Manhole Frame and Cover	142
2	Manhole Step Iron	146	8	Moulded Gutter	81	13	Manhole Frame and Cover	142
2	Bell-Trap Cesspool	129	8	Hopper Outlet	74	13	Manhole Frame and Cover	142
2	Curb for Trench	120	8	Stop Cock Case	136	13	Manhole Frame and Cover	142
2	Air Brick	105	8	Manhole Frame and Cover	141	13	Manhole Frame and Cover	142
Fig. 2	Garden Seat	163	8	Floor Drain	130	13	Manhole Frame and Cover	142
2	Pipes Ears	13	8	Curb for Trench	120	13	Manhole Frame and Cover	142
3	O.G. Gutter	79	8	Wringer Plate	148	13	Manhole Frame and Cover	142
3	Pavement Gutter	100	8	Ventilating Grating	101	13	Manhole Frame and Cover	142
3	Cast-Iron Gutter Bracket	76	8	Guard Post	158	13	Manhole Frame and Cover	142
3	Hopper Outlet	73	8	Garden Seat	163	13	Manhole Frame and Cover	142
3	Gutter Grate	74	Fig. 8	Large Radius Bend	17	13	Manhole Frame and Cover	142
3	Stop Cock Case	136	9	Moulded Gutter	81	13	Manhole Frame and Cover	142
3	Manhole Frame and Cover	139	9	Hopper Outlet	74	13	Manhole Frame and Cover	142
3	Bell-Trap Cesspool	129	9	Gutter Grate	74	13	Manhole Frame and Cover	142
3	Curb for Trench	120	9	Bell-Trap Cesspool	129	13	Manhole Frame and Cover	142
3	Air Brick	105	9	Curb for Trench	120	13	Manhole Frame and Cover	142
Fig. 3	Gully Trap	135	9C	Wringer Plate	148	13	Manhole Frame and Cover	142
3	Spun Pipes	14	9	do. do.	148	13	Manhole Frame and Cover	142
4	O.G. Gutter with Lion's Head	79	Fig. 9	Ventilating Grating	101	13	Manhole Frame and Cover	142
4	Pavement Gutter	100	9	Large Radius Bend with Door	18	13	Manhole Frame and Cover	142
4	Hopper Outlet	73	10	Moulded Gutter	82	13	Manhole Frame and Cover	142
4	Gutter Grate	74	10	Gutter Grate	74	13	Manhole Frame and Cover	142
4	Stop Cock Case	136	10	Stop Cock Case	136	13	Manhole Frame and Cover	142
4	Manhole Frame and Cover	140	10	Bell-Trap Cesspool	129	13	Manhole Frame and Cover	142
4	Bell-Trap Grating	130	10	Wringer Plate	148	13	Manhole Frame and Cover	142
4	Curb for Trench	120	10	Ballmouth	41	13	Manhole Frame and Cover	142
4	Air Brick	105	Fig. 10	Large Radius Bend with Door on Heel	19	13	Manhole Frame and Cover	142
4	Wringer Plate	148	11	Cast-Iron Gutter Bracket	76	13	Manhole Frame and Cover	142
4	do. do.	148	11	Gutter Grate	74	13	Manhole Frame and Cover	142
4	Regent Trap	135	11	Bell-Trap Cesspool	129	13	Manhole Frame and Cover	142
Fig. 4	Short Radius Bend	15	11	Ballmouth	41	13	Manhole Frame and Cover	142
5	Pavement Gutter	100	11	Wringer Plate	148	13	Manhole Frame and Cover	142
5	Hopper Outlet	73	Fig. 11	Offset	20	13	Manhole Frame and Cover	142
5	Gutter Grate	74	12	Moulded Gutter	82	13	Manhole Frame and Cover	142
5	Stop Cock Case	136	12	Cast-Iron Gutter Bracket	76	13	Manhole Frame and Cover	142
5	Manhole Frame and Cover	140	12	Rain-Water Head	51	13	Manhole Frame and Cover	142
5	Bell-Trap Grating	130	12	Rain-Water Head for Corner	51	13	Manhole Frame and Cover	142
5	Curb for Trench	120	12	Stop Cock Case	137	13	Manhole Frame and Cover	142
5	Spiral Stair	155	12	Bell-Trap Cesspool	129	13	Manhole Frame and Cover	142
Fig. 5	Guard Post	158	12	Curb for Trench	121	13	Manhole Frame and Cover	142
6	Bend (with Heel Rest)	15	Fig. 12	Ventilating Grating	104	13	Manhole Frame and Cover	142
6	Moulded Gutter	80	13	Branch (Equal Socket)	21	13	Manhole Frame and Cover	142
				Moulded Gutter	82	13	Manhole Frame and Cover	142

No.	Description	Page	No.	Description	Page	No.	Description	Page
22	Air Brick	105	Fig. 42	Sanitary Bend	37	68	Continuous Grating	113, 115
Fig. 22	Inverted Socket Branch	27	Fig. 43	Sanitary Bend (Long Tail)	37	Fig. 68	Rain - Water Straight	
23	Air Brick	105	44	Moulded Gutter	87	69	Stair Step	152
23	Stair Step	152	Fig. 44	S-Trap Branch	38	Fig. 69	S-Trap with Grating	135
Fig. 23	Inverted Socket Branch, 180°	27	45	Moulded Gutter	87	70	Rain-Water Head	52
24	Boundary-Wall Gutter	96, 97	45	Rain-Water Head	51	70	Rain-Water Head for Corner	52
24	Mild Steel Gutter		45	Rain-Water Head for Corner	51	70	Ventilating Grating	104
24	Stop Cock Case	138	45	Ventilating Grating	101	Fig. 70	S-Trap Flat Bottomed	135
Fig. 24	Inverted Spigot Branch	28	Fig. 45	P-Trap Branch	38	71	Air Brick	105
25	Mild Steel Gutter		46	Continuous Grating	109, 110	71	Cistern Bracket	147
25	Bracket	75	46	Rain-Water Head	51	Fig. 71	P-Trap with Grating	135
25	Stop Cock Case	138	46	Rain-Water Head for Corner	51	72	Ventilating Grating	104
Fig. 25	Inverted Spigot Branch, 180°	28	46	Ventilating Grating	101	Fig. 72	P-Trap Flat Bottomed	135
26	Mild Steel Gutter		Fig. 46	Multi-Branch Pipe	39	73	Surface Grating and Frame	124
26	Bracket	75	47	Ventilating Grating	101	73	Garden Seat	163
26	Stop Cock Case	138	47	Continuous Grating	116	73	Stair Step	152
Fig. 26	Trap (with Heel Rest)	29	Fig. 47	Multi-Branch Pipe	39	73R	Stair Step (Recessed)	153
27	Mild Steel Gutter		48	Continuous Grating	109, 110, 111, 113	Fig. 73	Bollard	159
27	Bracket	75	48	Rain-Water Head	51	Fig. 74	B.S.S. Bollard (Single)	159
27	Stop Cock Case	138	Fig. 48	Multi - Branch Pipe (W.C.)	39	Fig. 75	B.S.S. Bollard (Double)	160
Fig. 27	Trap, 180°	29	49	Multi-Branch Pipe	39	76	Surface Grating	122
28	Mild Steel Gutter		50	Cistern Bracket	147	76	Ventilating Grating	101
28	Bracket	75	50	Surface Grating	122	77	Cistern Bracket	147
Fig. 28	Trap, 95°	29	50	Stair Step	150	78	Moulded Gutter	88
29	Moulded Gutter	84	Fig. 50	Layout of Multi-Branches	40	78	Surface Grating	123
29A	do. do.	84	51	Moulded Gutter	87	79	Garden Seat	163
29	Mild Steel Gutter		51	Stair Step and Riser	150	82	Stair Step	153
29	Bracket	75	Fig. 51	Holdfast	41	84	Cistern Bracket	147
Fig. 29	Trap, 135°	29	Fig. 52	Union Slip	41	84	Ventilating Grating	101
30	Mild Steel Gutter		53	Moulded Gutter	87	85	do. do.	102
30	Bracket	75	Fig. 53	No. 1 Rain-Water Pipe	42	86	Surface Grating	122
Fig. 30	Oval Access Doors	30	54	Stair Step	151	86	Spiral Step	156
31	Valley Gutter	98	Fig. 54	Rain-Water Swanneck	43	87	Surface Grating	122
Fig. 31	Rectangular Inspection Door	31	55	Stair Step and Riser	151	87	Spiral Step	156
32	Rain-Water Head	51	55	Air Brick	105	88	Surface Grating	123
32	Mild Steel Gutter		Fig. 55	Rain-Water Inset	43	88	Garden Seat	163
32	Bracket	75	56	Surface Grating	122	89	Surface Grating	123
Fig. 32	Diminishing Piece	32	56	Spiral Stair	157	89	Garden Seat	163
33	Mild Steel Gutter		Fig. 56	Rain-Water Bend	44	90	Surface Grating and Frame	124
33	Bracket	75	Fig. 57	Rain - Water Branch (Single)	45	90	Stair Step	153
33	Ventilating Grating	101	Fig. 58	Rain - Water Branch (Double)	46	91	do. do.	154
Fig. 33	Inspection Piece (Oval Door)	33	Fig. 59	Rain-Water Inverted Branch (Single)	47	92	Cesspool Box	128
34	Trough Boundary-Wall Gutter	97	Fig. 60	Rain - Water Inverted Branch (Double)	47	92	Stair Step	154
34	Moulded Gutter	84	Fig. 61	Rain-Water Shoe	48	93	do. do.	154
34	Air Brick	105	Fig. 62	Rain-Water Anti-Splash Shoe	48	94	Ventilating Grating	104
Fig. 34	Inspection Piece (Rectangular Door)	33	Fig. 63	Rain-Water Eaves Bend	49	95	do. do.	102
35	North - Light Valley Gutter	99	64	Surface Grating	123	96	Rain-Water Head	52
35	Continuous Grating	109, 110, 111, 113, 114, 116	64	Surface Grating and Frame	124	96	Rain-Water Head for Corner	52
35	Ventilating Grating	101	64A	do. do.	124	96	Ventilating Grating	102
Fig. 35	Loose Sockets	34	64B	do. do.	124	97	Air Brick	105
36	Moulded Gutter	85	64C	do. do.	124	98	do. do.	106
36	Ventilating Grating	101	Fig. 64	Y-Piece	49	99	do. do.	106
Fig. 36	Collar	34	65	Louvre Ventilator	108	101	Continuous Grating	109
Fig. 37	Shoe	34	Fig. 65	Rain - Water Parallel Branch	49	102	Surface Grating and Frame	124
Fig. 38	Cast-Iron Holderbat	35	66	Surface Grating and Frame	124	102	Cistern Bracket	147
39	Moulded Gutter	85	66	Spiral Step	156	103	Surface Grating	123
Fig. 39	Sanitary Connection	36	Fig. 66	Rain - Water Curved Branches Piece	49	103	Moulded Gutter	88
40	Moulded Gutter	85	67	Surface Grating	122	104	Surface Grating	123
Fig. 40	Connecting Socket	36	Fig. 67	Rain - Water Double Boot	49	105	Chequer Plate	118, 122
41	Moulded Gutter	85				107	Continuous Grating	109
41	Hart's Trap Grating	122				114	Chequer Plate	118
Fig. 41	Connecting Socket	36				115	Surface Grating	123
42	Moulded Gutter	86, 87				116	Continuous Grating	111
						117	Continuous Grating	109, 111
						118	Surface Grating	122
						119	do. do.	123
						120	do. do.	123

No.	Description	Page	No.	Description	Page	No.	Description	Page
121	Grease Box Covers	127	252	Moulded Gutter	88	330	Rain-Water Head	62
122	Air Brick	106	252	Rain-Water Head	55	331	do. do.	62
126	Surface Grating and Frame	125	253	Enriched Gutter	90	332	do. do.	62
129	Continuous Grating	109	255	do. do.	91	334	do. do.	62
133	Road Gully Frame and Grating	125	256	Rain-Water Head	55	335	do. do.	62
133K	do. do.	125	257	Enriched Gutter	91	336	do. do.	62
133L	do. do.	125	258	Rain-Water Head	56	337	do. do.	62
136	Snow Grating	72	261	Enriched Gutter	91	338	do. do.	63
138	Air Brick	106	264	do. do.	91	338	Rail Standard	158
141	Cast-Iron Gutter Bracket	76	265	do. do.	91	339	Rain-Water Head	63
141	Ventilating Grating	102	266	do. do.	91	340	do. do.	63
142	Cast-Iron Gutter Bracket	76	267	Rain-Water Head	56	343	Rail Standard	158
143	Ventilating Grating	104	268	do. do.	56	344	Rain-Water Head	63
144	Continuous Grating 114, 116		268	Enriched Gutter	92	345	do. do.	63
144	Coal Shoot Frame and Cover	125	270	Moulded Gutter	89	347	do. do.	63
147	Ventilating Grating	102	271	do. do.	89	348	do. do.	63
147	Cast-Iron Gutter Bracket	76	271	Rain-Water Head	56	352A	do. do.	64
149	Continuous Grating	114	273	Enriched Gutter	92	354	do. do.	64
153	Cistern Bracket	147	273	Rain-Water Head	56	355	do. do.	64
154	Pillar Legs for Tub and Sink	149	274	Enriched Gutter	92	356	do. do.	64
155	do. do.	149	274	Rain-Water Head	56	357	do. do.	64
156	Tub and Sink Bracket	147	275	do. do.	56	358	do. do.	64
156R	do. do.	147	275	Enriched Gutter	92	359	do. do.	64
157	do. do.	147	276	do. do.	92	362	do. do.	65
157R	do. do.	147	277	do. do.	93	363	do. do.	65
157	Lamp Pillar	147	278	Moulded Gutter	89	364	do. do.	65
158	Cistern Bracket	147	279	Enriched Gutter	93	365	do. do.	65
161	do. do.	147	280	Moulded Gutter	89	367A	do. do.	65
162	Continuous Grating	118	281	Rain-Water Head	56	372	do. do.	65
163	Rain-Water Head	52	282	Enriched Gutter	93	375	do. do.	65
164	Continuous Grating	116	282	do. do.	93	375	Rain-Water Head for Corner	65
164	Lamp Pillar	161	283	Rain-Water Head	57	376	Rain-Water Head	66
166	do. do.	161	284	do. do.	57	377	do. do.	66
167	do. do.	161	284	Enriched Gutter	93	377	Rail Standard	158
168	Rain-Water Head	52	285	do. do.	93	385	Rain-Water Head	66
168	Tub and Sink Bracket	147	285	Rain-Water Head	57	386	do. do.	66
170	Rain-Water Head	52	287	Moulded Gutter	89	388	do. do.	66
173	Cistern Bracket	147	288	Rain-Water Head	57	390	do. do.	66
173	Lamp Pillar	162	289	do. do.	57	391	do. do.	66
175	Rain-Water Head	52	290	do. do.	57	392	do. do.	67
176	Cast-Iron Gutter Bracket	76	291	do. do.	57	394	do. do.	67
177	Rain-Water Head	53	292	do. do.	58	394A	do. do.	67
177	Rain-Water Head for Corner	53	294	do. do.	58	394B	do. do.	67
188	Rain-Water Head	52	296	do. do.	58	394C	do. do.	67
195	do. do.	52	297	do. do.	58	394D	do. do.	67
196	do. do.	53	297	Rain-Water Head for Corner	58	396	do. do.	67
201	do. do.	53	298	Rain-Water Head	58	397	do. do.	67
201	Rain-Water Head for Corner	53	300	do. do.	58	398	do. do.	67
202	Enriched Gutter	90	300A	Rain-Water Head for Corner	58	399	do. do.	67
208	Rain-Water Head	54	304	Rain-Water Head	59	400	do. do.	67
210	Trough Valley Gutter	99	305	do. do.	59	401	do. do.	68
210	Rain-Water Head	54	306	do. do.	59	402	do. do.	68
215	Moulded Gutter	88	306	Rain-Water Head for Corner	59	405	do. do.	68
216	Rain-Water Head	54	307	do. do.	59	406	do. do.	68
226	do. do.	54	307	Rain-Water Head	59	408	do. do.	68
231	do. do.	54	309	do. do.	59	414	do. do.	68
237	do. do.	55	313	do. do.	59	417	do. do.	68
238	do. do.	55	313	do. do.	59	424	do. do.	68
239	Moulded Gutter	88	313A	do. do.	59	489	Rail Standard	158
239	Rain-Water Head	55	314	do. do.	60	585	Ventilating Grating	104
242	do. do.	55	315	do. do.	60	587	Continuous Grating	110
246	do. do.	55	316	do. do.	60	589	Air Brick	106
246	Enriched Gutter	90	317	do. do.	60	590	do. do.	106
248	Moulded Gutter	88	318	do. do.	60	596	Continuous Grating 110, 116	
248	Ventilating Grating	102	319	do. do.	60	612	Rail Standard	158
249	Continuous Grating 111, 114		320	do. do.	60	616	Surface Grating	123
250	Rain-Water Head	55	321	do. do.	61	618	Air Brick	106
251	Enriched Gutter	90	322	do. do.	61	619	Surface Grating	122
			323	do. do.	61	621	do. do.	125
			325	do. do.	61	622	Ventilating Grating	105
			326	do. do.	61	623	Rail Standard	158
			328	do. do.	61	625	Air Brick	106
			329	do. do.	61	626	do. do.	106

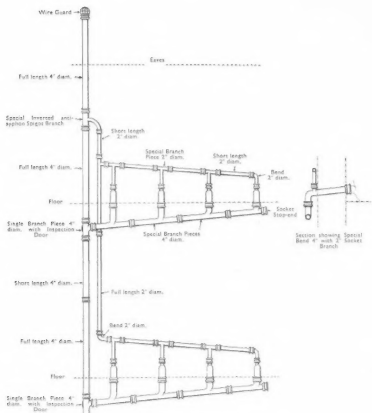


No.	Description	Page	No.	Description	Page	No.	Description	Page
627	Air Brick . . .	106	726	Ventilating Grating . .	103	844	Ventilating Grating . .	103
628	do. . .	106	728	Continuous Grating . .	115	845	Leak-proof Outlet . .	133
629	do. . .	107	739	do. do. . .	112, 113	847	Surface Grating . .	123
639	Continuous Grating . .	109	741	do. do. . .	112, 113, 114, 115	848	do. do. . .	123
641	Air Brick . . .	107	743	Surface Grating and Frame . . .	126	849	Leak-proof Outlet . .	133
645	Continuous Grating . .	111, 112	749	Continuous Grating . .	110, 115	850	do. do. . .	133
649	do. do. . .	117	750	Bellmouth . . .	41	864	Continuous Grating . .	113
651	do. do. . .	111	751	do. do. . .	41	867	Ventilating Grating . .	103
651	Ventilating Grating . .	102	755	Continuous Grating . .	115	868	Continuous Grating . .	110, 112, 117
652	do. do. . .	102	757	Manhole Frame and Cover . . .	143	869	do. do. . .	111, 112, 117
656	Air Brick . . .	107	758	Cesspool Box . . .	128	870	Surface Grating and Frame . . .	127
658	do. do. . .	107	759	do. do. . .	128	874	Leak-proof Outlet . .	133
659	Continuous Grating . .	117	785	Surface Grating . .	123	875	do. do. . .	133
662	Surface Grating and Frame . . .	125	786	Rain-Water Gully Inlet . .	107	877	Surface Grating and Frame . . .	127
667	Bellmouth . . .	41	787	Ventilating Grating . .	103	881	Leak-proof Outlet . .	133
669	Air Brick . . .	107	789	Fire Plug Box . . .	146	882	Surface Grating and Frame . . .	127
672	Continuous Grating . .	117	790	do. do. . .	146	883	Leak-proof Outlet . .	134
675	Surface Grating and Frame . . .	125	795	Ventilating Grating . .	103	886	do. do. . .	134
677	Ventilating Grating . .	103	796	Leak-proof Outlet . .	132	888	do. do. . .	134
681	Louvre Ventilator . .	108	796A	do. do. . .	132	892	Coal Shoot Frame and Cover . . .	127
682	Surface Grating and Frame . . .	125	797	do. do. . .	132	894	Leak-proof Vent Pipe . .	134
683	do. do. . .	126	797A	do. do. . .	132	895	do. do. . .	134
684	Chequer Plate . . .	118	798	Continuous Grating . .	110	896	Cesspool Box . . .	128
686	Air Brick . . .	107	799	do. do. . .	112	900	Grating . . .	119
688	Continuous Grating . .	109	803	Ventilating Grating . .	104	901	do. do. . .	119
694	Surface Grating . .	122	805	Surface Grating and Frame . . .	126	902	Manhole Frame and Cover . . .	146
695	do. do. . .	122	808	do. do. . .	126	905	Fire Hydrant Box . .	146
698	Louvre Ventilator . .	108	809	Louvre Ventilator . .	108	906	Duct Tray Cover . .	119
699	Air Brick . . .	107	810	Ventilating Grating . .	103	907	Continuous Grating . .	111
700	Manhole Frame and Cover . . .	143	815	P-Trap . . .	135	908	Balcony Gully . . .	131
703	Louvre Ventilator . .	108	816	Leak-proof Outlet . .	132	909	Roof Gully . . .	131
709	Air Brick . . .	107	817	Louvre Ventilator . .	108	910	Duct Tray Cover . .	119
710	Continuous Grating . .	110	818	S-Trap . . .	135	911	Continuous Grating . .	112
711	Surface Grating and Frame . . .	126	818	P-Trap . . .	135	912	do. do. . .	114
712	do. do. . .	126	819	Ventilating Grating . .	103	913	do. do. . .	114
7125	do. do. . .	126	831	Continuous Grating . .	116	914	Manhole Frame and Cover . . .	143
714	Continuous Grating . .	117	833	do. do. . .	112	915	Lamp Pillar . . .	162
718	Ventilating Grating . .	103	834	Surface Grating and Frame . . .	127	916	Frames and Covers Units . . .	144, 145
730	Continuous Grating . .	110	839	Surface Grating . .	123			
734	Ventilating Grating . .	103	840	Surface Grating and Frame . . .	127			
725	Surface Grating and Frame . . .	126	842	Cesspool . . .	128			

# TYPICAL ARRANGEMENT OF PIPE STACKS TO ASSIST WHEN ORDERING

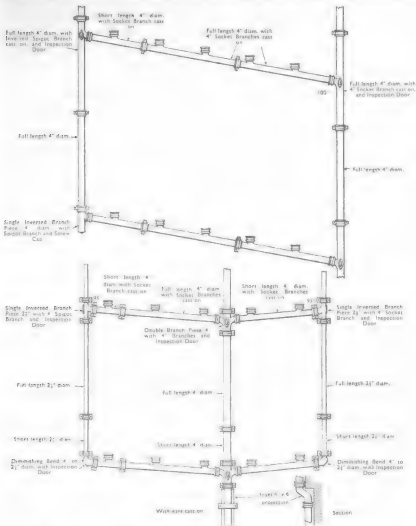
B.S.S.

Soil and Ventilating Pipes



LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

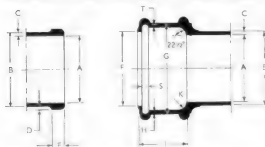
## TYPICAL ARRANGEMENT OF PIPE STACKS TO ASSIST WHEN ORDERING



LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## STRAIGHT PIPES AND TYPE "A" SOCKETS AND SPIGOTS

Dimensions of Straight Pipes and Type "A" Sockets and Spigots



NOTE: The Spigot Bead and Socket Groove shown above are optional features.



FIG. 1

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

# STRAIGHT PIPES AND TYPE "A" SOCKETS AND SPIGOTS

TABLE I

Dimensions of Straight Pipes and Type "A" Sockets and Spigots

	Nominal Size	Extra Heavy Grade			Heavy Grade			Medium Grade						
		in. 3½	in. 4	in. 6	in. 3	in. 3½	in. 4	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6	
PIPE	Internal diameter minimum	A	3½	4	6	3	3½	4	2	2½	3	3½	4	6
	External diameter minimum	B	4	4½	6½	3½	3¾	4½	2½	2¾	3½	3¾	4½	6½
	Thickness nominal	C	½	½	½	½	½	½	⅝	⅝	⅝	⅝	⅝	⅝
	Projection of spigot band*	D	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝
	Width of spigot band*	E	2	2	2	2	2	2	2	2	2	2	2	2
	Internal diameter minimum	F	4½	5	7½	3¾	4½	5	2½	3½	3¾	4½	5	7½
	External diameter minimum	G	5½	5½	7½	4½	5½	5½	3½	3½	4½	5	5½	7½
	Thickness nominal	H	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝
	Internal depth	I	3	3	3½	2½	3	3	2½	2½	2½	3	3	3½
	Internal radius	K	½	½	½	½	½	½	½	½	½	½	½	½
SOCKET TYPE "A"	Width of groove*	S	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝
	Depth of groove *	T	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝

\* Optional features.

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## PIPES WITH EARS

EARS.—Unless otherwise specified, pipes and fittings shall be supplied without ears. If ears are required they can be supplied as follows :—

- (a) SAND-CAST PIPES.—Cast during the manufacture of the pipe.
- (b) SPUN PIPES.—As loose bands, or rigidly attached to the socket of the pipe, or cast integrally with the pipe during the spinning operation.

*The purchaser shall state whether flat or projecting ears are required.*



Front View



Flat Ear



Projecting Ear

FIG. 2

## SPUN PIPES



Two views of the Pipe showing the B.S. Ear cast integrally with the Pipe during the spinning operation.

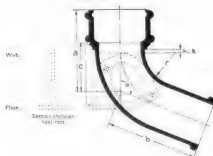


(Right)  
Spun Pipe  
without  
ears.

FIG. 3

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

# **SHORT RADIUS BENDS WITH AND WITHOUT ACCESS DOORS**



Short Radius Bend



FIG. 4

92½° 95° 100° 112½°  
120° 135°

Short Radius Bend  
with Heel Rest



FIG. 5

92½° 95° 100° 112½°  
120° 135°

Short Radius Bend  
with Oval Access Door  
on Heel



FIG. 6

92½° 95° 100° 112½°  
120° 135°

Short Radius Bend  
with Oval Access Door  
on Side



FIG. 7

92½° 95° 100° 112½°  
120° 135°



# SHORT RADIUS BENDS WITH AND WITHOUT ACCESS DOORS

TABLE 3

$R = 92\frac{1}{2}$

Nom. Size	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	6	6½	6¾	7⅞	7⅞	9½
b	5½	6½	6¾	7	7½	8½
c	3½	3½	4½	4⅞	4½	5½
k	⅞	⅞	¾	¾	¾	¾
r	1½	1½	1½	1½	1½	1½

$R = 95$

Nom. Size	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	5½	6½	6¾	7⅞	7⅞	8½
b	5½	6½	6¾	7	7	8½
c	3½	3½	4	4⅞	4⅞	5½
k	⅞	⅞	¾	¾	¾	¾
r	1½	1½	1½	1½	1½	1½

$R = 100$

Nom. Size	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	5½	6½	6¾	6¾	7½	8½
b	5½	6½	6¾	7	7½	8½
c	3½	3½	3½	3½	4½	5½
k	¾	¾	¾	¾	¾	¾
r	1½	1½	1½	1½	1½	1½

$R = 104$

Nom. Size	in. 3½	in. 4
a	6½	6½
b	7	7½
c	3½	3½
k	¾	¾
r	1½	1½

$R = 112\frac{1}{2}$

Nom. Size	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	5½	5½	5½	7½	7½	8½
b	5½	6½	6½	6½	6½	7½
c	2½	2½	3½	4½	4½	5½
k	⅞	⅞	⅞	¾	¾	¾
r	1½	1½	1½	2½	2½	2½

$R = 120$

Nom. Size	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	5	5½	5½	7½	7½	8½
b	5½	6½	6½	6½	6½	7½
c	2½	2½	2½	4½	4½	5
k	⅞	⅞	⅞	¾	¾	⅞
r	1½	1½	1½	3½	3½	3½

$R = 135$

Nom. Size	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	5	5½	5½	6½	7	7½
b	5½	6½	6½	6½	6½	7½
c	2½	2½	2½	3½	4	4½
k	¾	⅞	⅞	¾	¾	⅞
r	2½	2½	2½	4½	4½	4½

**OVAL ACCESS DOORS.**—For details of oval access doors see Table 15.

The centre of an access door, when fitted, should be approximately symmetrical with the centre line of the fitting and as near the intersection of the two axes as possible.

**HEEL RESTS.**—The heel rests shall be located where the centre line through the socket strikes the outside edge of the pipe and extends outwards the same distance as the beads round the socket.

**PLATE.**—Width of plate,  $\frac{1}{4}$  diameter of pipe. Thickness not less than  $\frac{1}{16}$  in.

**WEB.**—Thickness of web, not less than  $\frac{1}{4}$  in. from outside edge of pipe.

Spigots, sockets and ears of short radius bends to be the same as for straight pipes of corresponding nominal size.

**LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW**

# LARGE RADIUS BENDS

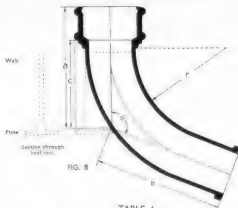


TABLE 4

$n = 92\frac{1}{2}$

Nom. Size	in. 3	in. 3½	in. 4	in. 6
a	11	11½	11½	13½
b	11½	11½	12	13
c	8½	8½	8½	9½
r	6	6	6	6

$n = 95$

Nom. Size	in. 3	in. 3½	in. 4	in. 6
a	10½	11½	11½	13
b	11½	11½	12	13
c	8½	8½	8½	9½
r	6½	6½	6½	6½

$n = 100$

Nom. Size	in. 3	in. 3½	in. 4	in. 6
a	10½	11½	11½	12½
b	11½	11½	12	12½
c	8	8½	8½	9½
r	6½	6½	6½	6½

$n = 112\frac{1}{2}$

Nom. Size	in. 3	in. 3½	in. 4	in. 6
a	10	10½	10½	11½
b	11	11½	11½	12½
c	7½	7½	7½	8½
r	8	8	7½	7½

$n = 120$

Nom. Size	in. 3	in. 3½	in. 4	in. 6
a	9½	10	10½	11½
b	10½	11	11½	12½
c	7	7	7½	7½
r	9	8½	8½	8½

$n = 135$

Nom. Size	in. 3	in. 3½	in. 4	in. 6
a	9	9½	9½	9½
b	10½	10½	10½	11½
c	6½	6½	6½	6½
r	11½	11	10½	9½

**HEEL RESTS.**—The heel rests shall be located where the centre line through the socket meets the outside edge of the pipe and shall extend outwards the same distance as the beads round the socket.

**PLATE.**—Width of plate,  $\frac{1}{4}$  diameter of pipe. Thickness, not less than  $\frac{1}{8}$ ".

**WEB.**—Thickness of web, not less than  $\frac{1}{4}$ " from outside edge of pipe.

Spigots, sockets and ears of large radius bends to be the same as for straight pipes of corresponding nominal size.

**LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW**

# LARGE RADIUS BENDS WITH INSPECTION DOOR ON SIDE

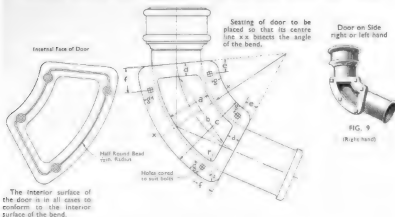
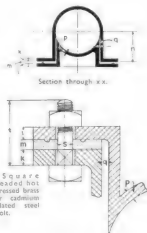


TABLE 5

Nominal Size	in. 3½	in. 4	in. 6
a	3½	4	6
b	7½	7½	9½
c	6½	7½	9½
d	1½	1½	1½
e	1½	1½	1½
f	2½	2½	2½
g	¾	¾	¾
h	¾	¾	¾
i	¾	¾	¾
m	¾	¾	¾
n	2½	2½	3½
o	1	1	1
p	1	1	1
q	1	1	1
r	1	1	1
s	1	1	1
t	1	1	1

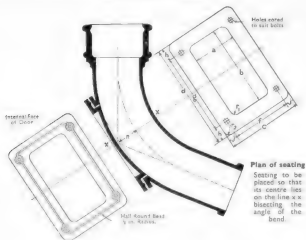


The dimensions given above apply equally to left-hand bends.

Overall dimensions of large radius bends with inspection doors to be the same as for the plain large radius bends. Table 4.

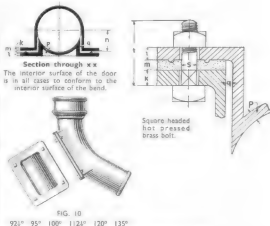
LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

# **LARGE RADIUS BENDS WITH RECTANGULAR INSPECTION DOOR ON HEEL**



**TABLE 6**

Nominal Size	in. 3½	in. 4	in. 6
a	3½	4	6
b	7½	7½	7½
c	6½	7½	9½
d	10	10	10
f	5½	5½	7½
g	7½	7½	7½
h	1½	1½	1½
i	1½	1½	1½
k	1½	1½	1½
l	1½	1½	1½
m	1½	1½	1½
n	1½	1½	1½
p	1½	1½	1½
q	1½	1½	1½
r	1½	1½	1½
s	1½	1½	1½
t	1½	1½	1½



Overall dimensions of large radius bends with inspection doors to be the same as for the plain large radius bends. Table 4.

**LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW**

# OFFSETS

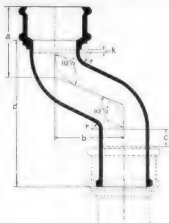


FIG. 11

Projections :  
3", 4½", 6", 9" and 12"

TABLE 7

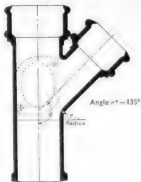
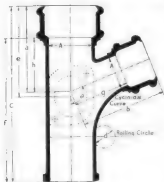
Nominal Sizes		in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
Projections b	a	4½	5½	5½	6	6½	7½
3 in., 4½ in.	r	1	1	1	1	1	1
6 in., 9 in. and 12 in.	c	2	2	2	2	2	2
	k	½	½	½	½	½	½
3 in.	d	9½	10½	10½	11½	11½	12½
4½ in.	d	10½	10½	11½	11½	12½	13½
6 in.	d	10½	11½	11½	12½	12½	14½
9 in.	d	12	12½	13	13½	14	15½
12 in.	d	13½	13½	14½	14½	15½	17½

In the case of fittings in which the projection is 3 in., the two radii at the centre of the pipe will be tangential to each other at a point slightly above the sloping centre line of the fitting, owing to the small projection.

Spigots, sockets and ears of swan neck bends to be the same as for straight pipes of corresponding nominal size.

**LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW**

# EQUAL BRANCHES WITH AND WITHOUT OVAL ACCESS DOORS



Equal Socket Branch



FIG. 12

92½° 95° 100° 112½° 120°

Equal Socket Branch



FIG. 13

135°

Equal Socket Branch  
with Oval Access Door  
on Back



FIG. 14

92½° 95° 100° 112½°  
120° 135°

Equal Socket Branch  
with Oval Access Door  
on Side



FIG. 15

92½° 95° 100° 112½°  
120° 135°

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

# EQUAL BRANCHES WITH AND WITHOUT OVAL ACCESS DOORS

$n = 92\frac{1}{2}$

A	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	4½	5½	5½	6½	6½	7½
b	6	6½	7½	7½	8½	10½
c	11½	13	14	15	16	20
d	1½	1½	1½	2½	2½	3
e	6½	6½	7	7½	7½	9½
f	9½	10½	11½	12	13	16½
g	3½	3½	4½	4½	5½	6½
h	2½	2½	2½	3½	3½	4½

$n = 100$

A	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	5½	5½	6	6½	7	8½
b	5½	6½	6½	7½	7½	9½
c	11½	13	14	15	16	20
d	1½	1½	1½	2½	2½	3
e	6½	6½	7	7½	7½	9½
f	9½	10½	11½	12	13	16½
g	3½	3½	4½	4½	5½	6½
h	2½	2½	3½	3½	4	5½

$n = 120$

A	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	5½	6½	7½	7½	8½	10½
b	5½	6½	7½	7½	8½	10½
c	11½	13	14	15	16	20
d	1½	1½	1½	2½	2½	3
e	6½	6½	7	7½	7½	9½
f	9½	10½	11½	12	13	16½
g	3½	3½	4½	4½	5½	6½
h	3½	3½	4½	4½	5½	6½

TABLE 8

$n = 92\frac{1}{2}$   
SPECIAL LONG  
BRANCHES

A	in. 3½	in. 4
a	6½	6½
b	7½	8½
c	39	39
d	2½	2½
e	7½	7½
f	36	36
g	4½	5½
h	3½	3½

$n = 104$

A	in. 3½	in. 4
a	6½	7½
b	7½	7½
c	15	16
d	2½	2½
e	7½	7½
f	12	13
g	4½	4½
h	3½	4½

For details of oval access doors, see Table 15.

For dimensions of equal branches with rectangular inspection doors, see Table 11.

Shigots, sockets and ends of equal branches to be the same as for straight pipes of corresponding nominal size.

NOTE.—When double branches are required repeat above dimensions on the other side.

$n = 95$

A	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	4½	5½	5½	6½	6½	8½
b	5½	6½	7	7½	8	10½
c	11½	13	14	15	16	20
d	1½	1½	1½	2½	2½	3
e	6½	6½	7	7½	7½	9½
f	9½	10½	11½	12	13	16½
g	3½	3½	4½	4½	5	6½
h	2½	2½	3	3½	3½	4½

$n = 112\frac{1}{2}$

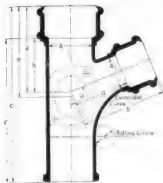
A	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	5½	6½	6½	7½	7½	9½
b	5½	6½	6½	7½	7½	9½
c	11½	13	14	15	16	20
d	1½	1½	1½	2½	2½	3
e	6½	6½	7	7½	7½	9½
f	9½	10½	11½	12	13	16½
g	3½	3½	4	4½	4½	6½
h	3½	3½	4	4½	4½	6½

$n = 135$

A	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	7	7½	8½	9½	10½	13½
b	7	7½	8½	9½	10½	13½
c	11½	13	14	15	16	20
d	1½	1½	1½	2½	2½	3
e	6½	6½	7	7½	7½	9½
f	9½	10½	11½	12	13	16½
g	4½	5½	6	6½	7½	9½
h	4½	5½	6	6½	7½	9½
i	1½	1½	1½	1½	1½	1½

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## UNEQUAL BRANCHES WITH AND WITHOUT OVAL ACCESS DOORS



The overall dimensions for standard unequal branches are determined on the following principle:

The projection of the arm from the outside of the body of the branch is the same as that on the standard equal branch having the same internal diameter of arm.



Unequal Socket Branch



FIG. 16

92½° 95° 100° 112½° 120°

Unequal Socket Branch



FIG. 17

135°

Unequal Socket Branch  
with Oval Access Door  
on Back



FIG. 18

92½° 95° 100° 112½°  
120° 135°

Unequal Socket Branch  
with Oval Access Door  
on Side



FIG. 19

92½° 95° 100° 112½°  
120° 135°

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW



# UNEQUAL BRANCHES WITH AND WITHOUT OVAL ACCESS DOORS

$\theta = 92\frac{1}{2}^\circ$

A	in. 3	in. 3 $\frac{1}{2}$	in. 3 $\frac{1}{2}$	in. 4	in. 4	in. 4	in. 6
A <sub>1</sub>	2	2	3	2	3	3 $\frac{1}{2}$	4
a	5 $\frac{1}{2}$	5 $\frac{1}{2}$	6	5 $\frac{1}{2}$	6	6	7 $\frac{1}{2}$
b	6 $\frac{1}{2}$	6 $\frac{1}{2}$	7 $\frac{1}{2}$	7	7 $\frac{1}{2}$	7 $\frac{1}{2}$	9 $\frac{1}{2}$
c	13	13 $\frac{1}{2}$	14 $\frac{1}{2}$	14	14 $\frac{1}{2}$	15	17
d	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$
e	6 $\frac{1}{2}$	7	7 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$	8 $\frac{1}{2}$
f	10 $\frac{1}{2}$	10 $\frac{1}{2}$	11 $\frac{1}{2}$	11	11 $\frac{1}{2}$	12	13 $\frac{1}{2}$
g	4	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	5 $\frac{1}{2}$	6 $\frac{1}{2}$
h	2 $\frac{1}{2}$	2 $\frac{1}{2}$	3	2 $\frac{1}{2}$	3	3	3 $\frac{1}{2}$

$\theta = 95^\circ$

A	in. 3	in. 3 $\frac{1}{2}$	in. 3 $\frac{1}{2}$	in. 4	in. 4	in. 4	in. 6
A <sub>1</sub>	2	2	3	2	3	3	4
a	5 $\frac{1}{2}$	5 $\frac{1}{2}$	6 $\frac{1}{2}$	5 $\frac{1}{2}$	6 $\frac{1}{2}$	6 $\frac{1}{2}$	7 $\frac{1}{2}$
b	6 $\frac{1}{2}$	6 $\frac{1}{2}$	7 $\frac{1}{2}$	6 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$	9
c	13	13 $\frac{1}{2}$	14 $\frac{1}{2}$	14	14 $\frac{1}{2}$	15	17
d	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	2 $\frac{1}{2}$
e	6 $\frac{1}{2}$	7	7 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$	8 $\frac{1}{2}$
f	10 $\frac{1}{2}$	10 $\frac{1}{2}$	11 $\frac{1}{2}$	11	11 $\frac{1}{2}$	12	13 $\frac{1}{2}$
g	3 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	6
h	2 $\frac{1}{2}$	2 $\frac{1}{2}$	3 $\frac{1}{2}$	2 $\frac{1}{2}$	3 $\frac{1}{2}$	3 $\frac{1}{2}$	3 $\frac{1}{2}$

$\theta = 100^\circ$

A	in. 3	in. 3 $\frac{1}{2}$	in. 3 $\frac{1}{2}$	in. 4	in. 4	in. 4	in. 6
A <sub>1</sub>	2	2	3	2	3	3	4
a	5 $\frac{1}{2}$	5 $\frac{1}{2}$	6 $\frac{1}{2}$	5 $\frac{1}{2}$	6 $\frac{1}{2}$	6 $\frac{1}{2}$	7 $\frac{1}{2}$
b	6 $\frac{1}{2}$	6 $\frac{1}{2}$	7 $\frac{1}{2}$	6 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$	8 $\frac{1}{2}$
c	13	13 $\frac{1}{2}$	14 $\frac{1}{2}$	14	14 $\frac{1}{2}$	15	17
d	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	2 $\frac{1}{2}$
e	6 $\frac{1}{2}$	7	7 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$	8 $\frac{1}{2}$
f	10 $\frac{1}{2}$	10 $\frac{1}{2}$	11 $\frac{1}{2}$	11	11 $\frac{1}{2}$	12	13 $\frac{1}{2}$
g	3 $\frac{1}{2}$	4	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	5 $\frac{1}{2}$
h	2 $\frac{1}{2}$	2 $\frac{1}{2}$	3 $\frac{1}{2}$	2 $\frac{1}{2}$	3 $\frac{1}{2}$	3 $\frac{1}{2}$	4 $\frac{1}{2}$

TABLE 9

$\theta = 104^\circ$

A	in. 4
A <sub>1</sub>	3 $\frac{1}{2}$
a	7 $\frac{1}{2}$
b	7 $\frac{1}{2}$
c	15
d	1 $\frac{1}{2}$
e	8
f	12
g	4 $\frac{1}{2}$
h	4 $\frac{1}{2}$

For details of oval access doors, see Table 15.

For dimensions of unequal branches with rectangular inspection doors, see Table 11.

$\theta = 112\frac{1}{2}^\circ$

A	in. 3	in. 3 $\frac{1}{2}$	in. 3 $\frac{1}{2}$	in. 4	in. 4	in. 4	in. 6
A <sub>1</sub>	2	2	3	2	3	3	4
a	6 $\frac{1}{2}$	6 $\frac{1}{2}$	7 $\frac{1}{2}$	6 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$	8 $\frac{1}{2}$
b	6 $\frac{1}{2}$	6 $\frac{1}{2}$	7	6 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$	8 $\frac{1}{2}$
c	13	13 $\frac{1}{2}$	14 $\frac{1}{2}$	14	14 $\frac{1}{2}$	15	17
d	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	2 $\frac{1}{2}$
e	6 $\frac{1}{2}$	7	7 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$	8 $\frac{1}{2}$
f	10 $\frac{1}{2}$	10 $\frac{1}{2}$	11 $\frac{1}{2}$	11	11 $\frac{1}{2}$	12	13 $\frac{1}{2}$
g	3 $\frac{1}{2}$	3 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	5 $\frac{1}{2}$
h	3 $\frac{1}{2}$	3 $\frac{1}{2}$	4 $\frac{1}{2}$	3 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	5 $\frac{1}{2}$

$\theta = 120^\circ$

A	in. 3	in. 3 $\frac{1}{2}$	in. 3 $\frac{1}{2}$	in. 4	in. 4	in. 4	in. 6
A <sub>1</sub>	2	2	3	2	3	3	4
a	6 $\frac{1}{2}$	6 $\frac{1}{2}$	7 $\frac{1}{2}$	7	7 $\frac{1}{2}$	7 $\frac{1}{2}$	9 $\frac{1}{2}$
b	6 $\frac{1}{2}$	6 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$	9 $\frac{1}{2}$
c	13	13 $\frac{1}{2}$	14 $\frac{1}{2}$	14	14 $\frac{1}{2}$	15	17
d	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	2 $\frac{1}{2}$
e	6 $\frac{1}{2}$	7	7 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$	8 $\frac{1}{2}$
f	10 $\frac{1}{2}$	10 $\frac{1}{2}$	11 $\frac{1}{2}$	11	11 $\frac{1}{2}$	12	13 $\frac{1}{2}$
g	4	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	6 $\frac{1}{2}$
h	3 $\frac{1}{2}$	3 $\frac{1}{2}$	4 $\frac{1}{2}$	4	4 $\frac{1}{2}$	4 $\frac{1}{2}$	5 $\frac{1}{2}$

$\theta = 135^\circ$

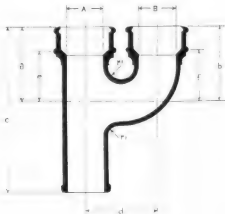
A	in. 3	in. 3 $\frac{1}{2}$	in. 3 $\frac{1}{2}$	in. 4	in. 4	in. 4	in. 6
A <sub>1</sub>	2	2	3	2	3	3	4
a	7 $\frac{1}{2}$	8 $\frac{1}{2}$	9 $\frac{1}{2}$	8 $\frac{1}{2}$	9 $\frac{1}{2}$	9 $\frac{1}{2}$	11 $\frac{1}{2}$
b	7 $\frac{1}{2}$	8 $\frac{1}{2}$	9 $\frac{1}{2}$	8 $\frac{1}{2}$	9 $\frac{1}{2}$	9 $\frac{1}{2}$	11 $\frac{1}{2}$
c	13	13 $\frac{1}{2}$	14 $\frac{1}{2}$	14	14 $\frac{1}{2}$	15	17
e	6 $\frac{1}{2}$	7	7 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$	8 $\frac{1}{2}$
f	10 $\frac{1}{2}$	10 $\frac{1}{2}$	11 $\frac{1}{2}$	11	11 $\frac{1}{2}$	12	13 $\frac{1}{2}$
g	5 $\frac{1}{2}$	5 $\frac{1}{2}$	6 $\frac{1}{2}$	6	6 $\frac{1}{2}$	6 $\frac{1}{2}$	8 $\frac{1}{2}$
h	5 $\frac{1}{2}$	5 $\frac{1}{2}$	6 $\frac{1}{2}$	5 $\frac{1}{2}$	6 $\frac{1}{2}$	6 $\frac{1}{2}$	8 $\frac{1}{2}$
r	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$

Spigots, sockets and ears of unequal branches to be the same as for straight pipes of corresponding nominal size.

NOTE.—When double branches are required repeat above dimensions on other side.

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

# PARALLEL BRANCHES, SINGLE, EQUAL AND UNEQUAL



Parallel Branch



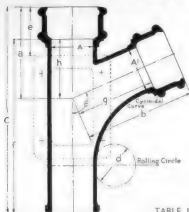
FIG. 20

TABLE 10.

A	in.	in.	in.	in.
	4	4	3½	3½
B	4	2	3½	2
a	2 7/8	6½	7½	6½
b	7	6 1/2	6½	6 1/4
c	16	14	15	13½
d	6 7/8	5½	6 1/2	5½
e	4 7/8	3½	4½	3½
f	4	3 7/8	3½	3 7/8
r	1 1/8	1 1/8	1 7/8	1 1/8

Note.—When double branches are required, repeat above dimensions on other side.

# EQUAL AND UNEQUAL BRANCHES WITH RECTANGULAR INSPECTION DOORS ONLY



Equal Socket Branch  
with Rectangular  
Inspection Door



FIG. 21

92½° 95° 100° 112½° 120°  
135°

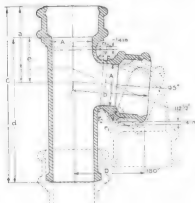
TABLE II

A	EQUAL				A <sub>1</sub>	UNEQUAL				
	A	2	3	4		2	3	4	5	6
92½°	8	6½	6½	8½	8	6½	6½	6½	6½	8½
95°	8	6½	6½	8½	8	6½	6½	6½	6½	8½
100°	8	6½	7½	9½	8	6½	6½	7½	7½	9½
112½°	8	8½	8½	10½	8	8½	8½	8½	8½	10½
120°	8	8½	9½	11½	8	8½	9½	9½	9½	11½
135°	8	10½	10½	12½	8	10½	10½	10½	10½	12½
A <sub>1</sub>	C	10½	10	22½	8	10½	9½	19	18	23½
92½°	8	4	4	5	8	4	4	4	4	5
95°	8	4	4	5	8	4	4	4	4	5
100°	8	4	4	5	8	4	4	4	4	5
112½°	8	4	4	5	8	4	4	4	4	5
120°	8	4	4	5	8	4	4	4	4	5
135°	8	4	4	5	8	4	4	4	4	5

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

### INVERTED BRANCHES

Socket Type



### Inverted Socket Branch



FIG. 22

95 1124

### Inverted Socket Branch



FIG. 23

180

TABLE 12

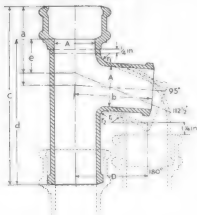
	95						112 <sub>1</sub>						180					
A Main Pipe	in. 2	in. 3½	in. 3½	in. 4	in. 4		in. 2	in. 3½	in. 3½	in. 4	in. 4		in. 2	in. 3½	in. 3½	in. 4	in. 4	
A Branch	2	3½	2	4	2		2	3½	2	4	2		2	3½	2	4	2	
a	5½	6½	5½	6½	5½		4½	5½	5	5½	4½		5½	6½	5½	6½	5½	
b	5½	6½	6½	7	6½		6	7½	6½	8½	7	D	4½	6½	5½	6½	5½	
c	12	15	13½	16	14		12	15	13½	16	14		12	15	13½	16	14	
d	9½	12	10½	13	11		9½	12	10½	13	11		9½	12	10½	13	11	
e	2½	3½	2½	3½	2½		2½	3½	2	2½	1½		2½	3½	2½	3½	2½	
f	1	1	1	1	1		1	1	1	1	1		1	1	1	1	1	
g	1	1	1	1	1		1	1	1	1	1		1	1	1	1	1	

Styngots and sockets to be the same as for straight pipes of the same nominal size.

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

# INVERTED BRANCHES

Spigot Type



Inverted Spigot Branch



FIG. 24

95° 112½

Inverted Spigot Branch



FIG. 25

180°

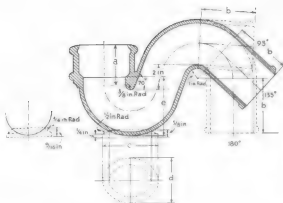
TABLE 13

95						112½						180					
A Main Pipe	in. 2	in. 3½	in. 3½	in. 4	in. 4	in. 2	in. 3½	in. 3½	in. 4	in. 4	in. 2	in. 3½	in. 3½	in. 4	in. 4		
A Branch	2	3½	2	4	2	2	3½	2	4	2	2	3½	2	4	2		
a	5½	6½	5½	6½	5½	4½	5½	5	5½	4½	5½	6½	5½	6½	5½		
b	5½	6½	6½	6½	6½	6½	7½	7½	8½	7½	4½	6½	5½	6½	5½		
c	12	15	13½	16	14	12	15	13½	16	14	12	15	13½	16	14		
d	9½	12	10½	13	11	9½	12	10½	13	11	9½	12	10½	13	11		
e	2½	3½	2½	3½	2½	2½	3½	2	2½	1½	2½	3½	2½	3½	2½		
f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
g	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		

Spigots and sockets to be the same as for straight pipes of the same nominal size.

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

# TRAPS



Trap  
with Heel Rest



FIG. 26 90° - 180°  
Any Trap can be supplied  
with Heel Rest



FIG. 27 180°



FIG. 28



FIG. 29

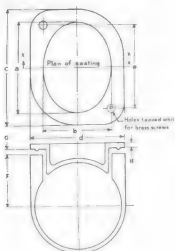
TABLE 14

Nominal Size	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	3½	3½	3½	3½	3½	4½
b	4½	4½	4½	5	5	5½
c	4	4½	4½	5	5½	6
d	3½	3½	3½	4½	4½	5
e	3½	3½	4½	4½	5½	7½

*Spigots and sockets of traps to be the same as for straight pipes of corresponding nominal size.*

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## OVAL ACCESS DOORS



Section X — X

FIG. 30

Screws to be of brass or cadmium-plated steel.

TABLE 15

Nominal Size	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	2½	3	3½	3¾	4	4½
b	1½	1½	2¼	2½	3¼	3½
c	3½	4½	4½	4½	5½	6
d	2½	2½	3½	3½	4½	5
e	2½	3½	3½	3½	3½	4½
F	1½	1½	1½	2½	2½	3½
G	½	½	½	½	½	½
H	½	½	½	½	½	½
P	½	½	½	½	½	½

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## RECTANGULAR INSPECTION DOORS

The interior surface of the door is in all cases to conform to the interior surface of the fitting to which the door is applied.

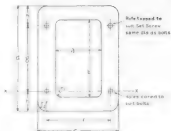
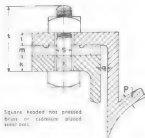


FIG. 31

TABLE 16

Nominal Size	in. 3 1/2	in. 4	in. 6
a	3 1/2	4	6
b	6 1/2	7	10
c	6 1/2	7 1/2	9 1/2
d	9	9 1/2	12 1/2
e	5 1/2	5 1/2	7 1/2
f	5 1/2	6	9
h	1 1/2	1 1/2	1 1/2
i	1 1/2	1 1/2	1 1/2
k	1 1/2	1 1/2	1 1/2
l	1 1/2	1 1/2	1 1/2
m	1 1/2	1 1/2	1 1/2
n	2 1/2	2 1/2	3 1/2
p	1 1/2	1 1/2	1 1/2
q	1 1/2	1 1/2	1 1/2
r	1 1/2	1 1/2	1 1/2
r <sub>1</sub>	1 1/2	1 1/2	1 1/2
s	1 1/2	1 1/2	1 1/2
t	1 1/2	1 1/2	1 1/2





# DIMINISHING PIECES

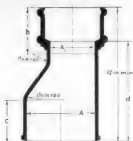


FIG. 32

TABLE 17

A	in. 2½	in. 3	in. 3	in. 3½	in. 3½	in. 3½	in. 4	in. 4
A <sub>1</sub>	2	2	2½	2	2½	3	2	2½
b	3½	3½	3½	3½	3½	3½	3½	3½
c	3	3	3	3½	3½	3½	3½	3½
d	9½	9½	9½	9½	9½	9½	9½	9½

A	in. 4	in. 4	in. 6	in. 6
A <sub>1</sub>	3	3½	3½	4
b	3½	4	4	4
c	3½	3½	3½	3½
d	9½	9	9	9

*Spigots, sockets and ears of diminishing pieces to be the same as for straight pipes of corresponding nominal size.*

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## STRAIGHT INSPECTION PIECES

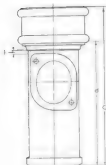


FIG. 33

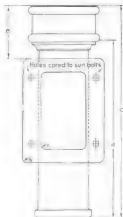


FIG. 34

TABLE 18

Nom. Size	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
c	11½	12½	13½	13½	14½	16½
d	9½	10	10½	10½	11½	12½
k	½	½	½	½	½	½

For details of oval access doors,  
see Table 15.

Nom. Size	in. 3½	in. 4	in. 6
c	18½	19	23½
d	15½	16	20
e	4½	4½	5½

For details of rectangular inspection doors,  
see Table 16.

*Spigots, sockets and ears of inspection pieces to be the same as for straight pipes of corresponding nominal size.*

## LOOSE SOCKETS AND COLLARS



Section

FIG. 35

TABLE 19

Nominal Size	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	This dimension is as given in Table 1 or Table 2					
b	2	2½	3	3½	4	6
c	½	½	½	½	½	½
d	3½	3½	3½	3½	3½	4½
e	3½	4	4	4½	4½	5½

The dimensions of loose sockets shall correspond to those of the appropriate nominal size of pipe given in Table 1 or Table 2.



FIG. 36

## SHOES

TABLE 20

Nominal Size	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 6
a	4½	5½	6	6½	7	9
b	2½	3½	3½	4½	4½	7½
c	2	2½	2	2½	2	2
d	5	5½	7	7½	9	12½

Sockets and ears of shoes to be the same as for straight pipes of corresponding nominal size.



FIG. 37

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

# CAST-IRON HOLDERBATS\*

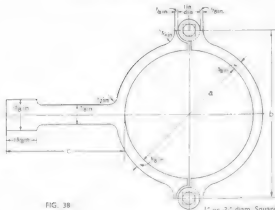


FIG. 38

$\frac{1}{2}$ " or  $\frac{3}{4}$ " diam. Square headed  
Hot Pressed Brass Bolt.



TABLE 21

Nom. Size of Pipe	2	2 $\frac{1}{2}$	3	3 $\frac{1}{2}$	4	6
a	3 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	5 $\frac{1}{2}$	5 $\frac{1}{2}$	7 $\frac{1}{2}$
b	5 $\frac{1}{4}$	5 $\frac{1}{4}$	6 $\frac{1}{4}$	7 $\frac{1}{4}$	7 $\frac{1}{4}$	9 $\frac{1}{4}$
c	5 $\frac{1}{4}$	5 $\frac{1}{4}$	6 $\frac{1}{4}$	7 $\frac{1}{4}$	7 $\frac{1}{4}$	9 $\frac{1}{4}$
d	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$
e	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$
f	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$
g	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$

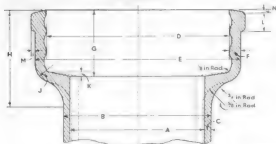
\*Similar Holderbats in Mild Steel can also be supplied.

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

# SANITARY CONNECTIONS

Applicable to 3½ in. and 4 in. Pipes only

Socket to fit W.C. outlet  
KEY DIAGRAM



Short Connection Pipe

Short Connecting Pipe  
Faucet to fit Earthenware  
Pipe.



FIG. 39

Dimension "B" 6", 9", 12", 18" and 24"

TABLE 22

	Nominal Size		in.	
			3½	4
PIPE	Internal diameter, minimum	A	3½	4
	External diameter	B	3½	4½
	Thickness, minimum	F	½	½
	Internal diameter, minimum	D	3	4
SOCKET	External diameter	E	6½	6
	Thickness	F	½	½
	Internal depth of socket	G	2	2
	External depth of socket	H	2½	2½
	Internal radius	I	½	½
	Depth of bevel	K	½	½
	Width of bead	L	½	½
	Projection of bead	M	½	½
	Taper on end	N	½	½

Socket to fit W.C. outlet



Cast-Iron Connecting Sockets  
for Earthenware Pipes



FIG. 40  
Type "A"



FIG. 41  
Type "B"

TYPE "A"

TYPE "B"

Nominal Size	in.	3½	4	Nominal Size	in.	3½	4
a	5½	5½	5½	a	5½	5½	5½
b	3½	3½	3½	b	3½	3½	3½
c	½	½	½	c	½	½	½
d	4	4	4	d	4	4	4
				e	2½	2½	2½

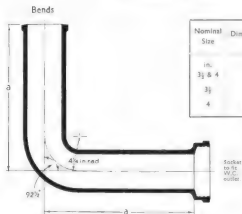
LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## SANITARY CONNECTIONS

Applicable to 3½ in. and 4 in. Pipes only

TABLE 23

Nominal Size	Dimensions	6 in. wall	9 in. wall	11 in. wall	13½ in. wall
in.		in.	in.	in.	in.
3½ & 4	a	15	18	20	22
3½	b	12½	15½	17½	19½
4	b	12½	15½	17½	19

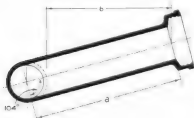


Bend  
Faucet to fit Earthenware Pipe



FIG. 42

Dimension "A" as "a" above  
Other sizes available  
12", 14", 16", 17" and 24"



Long-Tailed Bend  
Inside diameter of Faucet,  
5½"



FIG. 43

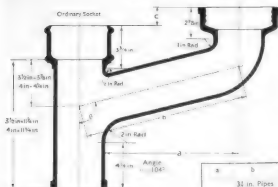
LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

# SANITARY CONNECTIONS

Applicable to  $3\frac{1}{2}$  in. and 4 in. Pipes only

S-Branch

Socket to fit W.C. outlet



S-Branch  
Faucet to fit Earthenware Pipe

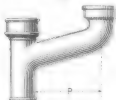


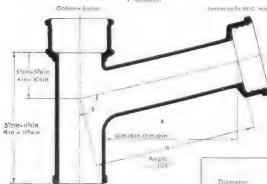
FIG. 44

TABLE 24

$3\frac{1}{2}$ in. Pipes			4 in. Pipes		
a	b	c	a	b	c
12	14 $\frac{1}{2}$	1 $\frac{1}{2}$	12	14 $\frac{1}{2}$	1 $\frac{1}{2}$
15	17 $\frac{1}{2}$	2 $\frac{1}{2}$	15	17 $\frac{1}{2}$	2 $\frac{1}{2}$
18	20 $\frac{1}{2}$	3 $\frac{1}{2}$	18	20 $\frac{1}{2}$	3 $\frac{1}{2}$
21	23 $\frac{1}{2}$	4 $\frac{1}{2}$	21	23 $\frac{1}{2}$	4 $\frac{1}{2}$
24	26 $\frac{1}{2}$	5 $\frac{1}{2}$	24	27	6 $\frac{1}{2}$

P-Branch

Socket to fit W.C. outlet



P-Branch  
Faucet to fit Earthenware Pipe



FIG. 45

TABLE 25

Dimension a				
Diameter	6 in. wall	9 in. wall	11 in. wall	13 $\frac{1}{2}$ in. wall
3 $\frac{1}{2}$	14 $\frac{1}{2}$	17 $\frac{1}{2}$	19 $\frac{1}{2}$	21 $\frac{1}{2}$
4	16 $\frac{1}{2}$	17 $\frac{1}{2}$	19 $\frac{1}{2}$	22

Dimension "P" 18", 21" and 24" Other sizes available.

NOTE: The nominal sizes, 12, 15, 17 and 19, relate to the respective wall sizes in the Table.

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

# BRITISH STANDARD SPECIFICATION "H" CAST-IRON MULTI-BRANCH PIPE FITTINGS

for Single-Stack Plumbing

Multi-Branch Fittings in various lengths—mainly 2' 6" to 3' 0" and 3' 6"—and in 3", 3½" and 4" diameters. Bosses, Branches and Inspection Doors placed where required.

## BOSSES

Normally set at 92½° and tapped 1½", 2" and 1½" B.S. Pipe Thread to suit Lavatory Basin, Sink Outlet and Bath Waste respectively.

## BRANCHES

Branches can be of varying diameters and can be set at any degree to order 92½°, 95°, 100°, 104°, etc.



FIG. 46

Multi-Branch Pipe with ordinary branches.



FIG. 47

Multi-Branch Pipe with ordinary branch and Inspection door.



FIG. 48

Multi-Branch Pipe with branch to suit W.C. outlet. The projection of branch is similar to standard P. branch projections.

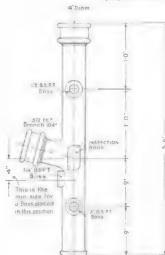


FIG. 49

Typical sketch of Multi-Branch Pipe showing sizes required when ordering.

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW



# LAYOUT OF TYPICAL SINGLE-STACK SHOWING MULTI-BRANCH

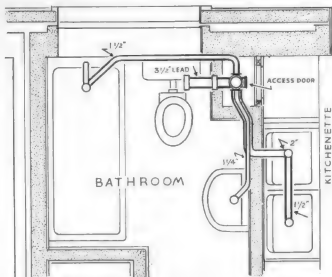


FIG. 50

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## SOIL AND VENTILATING PIPES

No. 10  
Bellmouth



2", 2½", 3", 3½" and 4" Diam.  
All 1' 6" Long

No. 11  
Bellmouth with Loose or  
Hinged Grating



Diam.  
3"  
4"  
6"

Height  
1' 0"  
1' 0"  
1' 0"

Grating  
7"  
8"  
9"

No. 667  
Bellmouth Piece with Hinged  
Grating



Diam.  
2"  
2½"  
3"

Height  
10"  
10"  
10"

Grating  
4½"  
6"  
6½"

No. 750  
Square Bellmouth  
with  
6" x 6" Loose Grating



2½" and 4"  
10½" x 10½" over top  
by 1' 6½" Long overall

No. 751

Bellmouths with Loose Gratings



2" and 3"  
11" Diam. over top  
by 1' 0" Long overall

3½", 4" and 5"  
1' 0½" Diam. over top  
by 1' 0" Long overall

Union Slip and Packing Piece, for replacing Pipes



Holdfast

FIG. 51

FIG. 52

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

# No. 1 RAIN-WATER PIPES

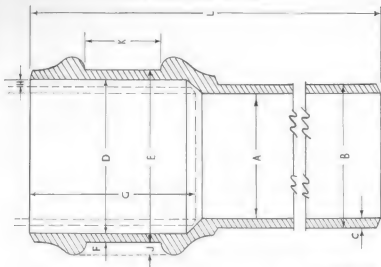


TABLE 26

	Nominal Size		in.	in.	in.	in.	in.
			2½	3	4	5	6
PIPE	Internal diameter	A	2½	3½	4½	5½	6½
	External diameter	B	2½	3½	4½	5½	6½
	Thickness	C	¼	¼	¼	¼	¼
SOCKET	Internal diameter	D	2-3/16	3-1/16	4-1/16	5-1/16	6-1/16
	External diameter	E	3-1/16	3-1/16	4-1/16	5-1/16	6-1/16
	Thickness	F	5/16	5/16	5/16	5/16	5/16
	Internal depth of socket	G	2½	2½	3½	3½	3½
	Packing space	H	1/8	1/8	1/8	1/8	1/8
	Projection of beads	I	1/8	1/8	1/8	1/8	1/8
	Distance between beads	J	1½	1½	1½	2	2½
	Overall length (feet)	L	6	6	6	6	6



FIG. 53

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## RAIN-WATER OFFSETS

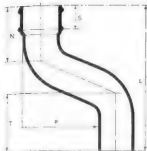


FIG. 54



FIG. 55

TABLE 27

Nominal Size		(1)	(2)	(3)	(4)	(5)	(6)
		3y	3	4	5	6	
P-Projection	L			12			
	N			3			
	T			5			
1 in.	S			7			
	L	17	17	13	13		
	N	6	5	5	6		
1 1/2 in.	T	21	21	16	16		
	S			19	17		
	L	11	12	10	10	16	17
2 in.	N	41	6	32	32	7	7
	T	40	23	36	33	42	34
	S	23					
2 1/2 in.	L	10	13	13	13	18	18
	N	41	18	32	32	7	7
	T	41	23	36	33	42	34
3 in.	S	23					
	L	11	12	10	10	16	17
	N	41	6	32	32	7	7
3 1/2 in.	T	40	23	36	33	42	34
	S	23					
	L	11	12	10	10	16	17
4 in.	N	41	18	32	32	7	7
	T	41	23	36	33	42	34
	S	23					
4 1/2 in.	L	11	12	10	10	16	17
	N	41	6	32	32	7	7
	T	41	23	36	33	42	34
5 in.	S	23					
	L	11	12	10	10	16	17
	N	41	6	32	32	7	7
6 in.	T	40	23	36	33	42	34
	S	23					
	L	11	12	10	10	16	17
6 1/2 in.	N	41	18	32	32	7	7
	T	41	23	36	33	42	34
	S	23					
7 in.	L	11	12	10	10	16	17
	N	41	6	32	32	7	7
	T	40	23	36	33	42	34
7 1/2 in.	S	23					
	L	11	12	10	10	16	17
	N	41	6	32	32	7	7
8 in.	T	40	23	36	33	42	34
	S	23					
	L	11	12	10	10	16	17

Normal Site	18 20	19 21	16 4	17 5	15 6
P-Production	1.34 7 5	1.41 41 6	7 89 36		
E-18	1.34 7 5	1.37 81 21	7 52 28	1.91 21 31	21 81 31
Dy-18	1.34 7 5	1.41 41 21	7 52 28	1.91 21 31	21 81 31
E-19	1.34 7 5	1.37 81 21	7 52 28	1.91 21 31	21 81 31
E-20	1.34 7 5	1.37 81 21	7 52 28	1.91 21 31	21 81 31
E-21	1.34 7 5	1.37 81 21	7 52 28	1.91 21 31	21 81 31
E-22	1.34 7 5	1.37 81 21	7 52 28	1.91 21 31	21 81 31
E-23	1.34 7 5	1.37 81 21	7 52 28	1.91 21 31	21 81 31
E-24	1.34 7 5	1.37 81 21	7 52 28	1.91 21 31	21 81 31
E-25	1.34 7 5	1.37 81 21	7 52 28	1.91 21 31	21 81 31
E-26	1.34 7 5	1.37 81 21	7 52 28	1.91 21 31	21 81 31
E-27	1.34 7 5	1.37 81 21	7 52 28	1.91 21 31	21 81 31
E-28	1.34 7 5	1.37 81 21	7 52 28	1.91 21 31	21 81 31
E-29	1.34 7 5	1.37 81 21	7 52 28	1.91 21 31	21 81 31
E-30	1.34 7 5	1.37 81 21	7 52 28	1.91 21 31	21 81 31

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

# RAIN-WATER BENDS

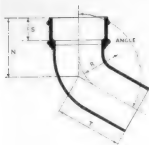


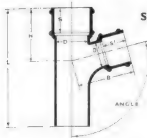
FIG. 56

TABLE 28

Nominal Size		in. 2½	in. 3	in. 4	in. 5	in. 6	Nominal Size		in. 2½	in. 3	in. 4	in. 5	in. 6
Angle	S	2½	2½	3½	3½	3½	Angle	S	2½	2½	3½	3½	3½
90°	N	5½	6½	7½	9	10½	115°	N	4½	5½	6½	7½	9
	T	7½	6½	7½	9½	10½		T	6½	6	6½	8½	9
	R	2½	2½	3½	4½	4½		R	3	3½	3½	4½	5½
95°	N	6	6½	7½	8	8½	120°	N	5	5½	6½	8	7½
	T	6½	6½	7½	8½	9½		T	6½	6½	7½	8	7½
	R	3	3½	3½	4½	4½		R	3½	3½	4	4½	4½
100°	N	5½	6½	7½	7½	8½	135°	N	5	5½	5½	7½	7
	T	6½	6½	7½	8½	9½		T	5½	6½	6½	7	7½
	R	3	3½	3½	4½	5½		R	3½	3½	3½	4½	4½
105°	N	5½	6½	7½	8	8½	147°	N	5½	5½			
	T	6½	6½	7½	8½	8½		T	5½	5½			
	R	3	3½	3½	4½	4½		R	3½	5			
110°	N	5½	6½	6½	8½	8½	158°	N	4½				
	T	6	7½	6½	8½	8½		T	5½				
	R	3	3½	3½	4½	4½		R	4½				
112½°	S	2½	2½		3								
	N	4½	4½		6½								
	T	4½	4½		6½								
	R	2½	2½		3½								

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

# RAIN-WATER SINGLE BRANCHES



Single Branch Piece  
(Socket Branch)

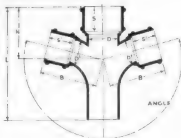


FIG. 57

TABLE 29

Diameter D	in. 2½	in. 2½	in. 2½	in. 3	in. 3	in. 3	in. 3	in. 4	in. 4	in. 4	in. 4	in. 5	in. 5	in. 6
S	2½	2½	2½	2½	2½	2½	2½	3½	3½	3½	3½	3½	3½	3½
Diameter D'	1½	2	2½	1½	2	2½	3	2	2½	3	4	4	5	6
S'	2½	2½	2½	2½	2½	2½	2½	2½	2½	2½	3½	3½	3½	3½
90°	N B L		5 6½ 12½	6 5½ 11	5½ 6 11½		5½ 6½ 12½	5½ 6½ 12			6½ 7½ 15	7½ 9½ 16	8½ 7½ 16½	8 9½ 18
95°	N B L	4½ 5½ 11½	5½ 5½ 12½		5 6½ 12	5½ 6½ 12½	5½ 6½ 12½							
100°	N B L		5½ 6 12	6½ 6½ 12½		5½ 6½ 12½	5½ 6½ 12½			6½ 6½ 14½			9½ 8½ 17	8½ 9½ 18½
105°	N B L	4½ 5½ 11½	5½ 5½ 11½	5½ 5½ 11½	4½ 5½ 11½	5½ 5½ 12½	5½ 5½ 12	6½ 6½ 13½	6½ 6½ 13½	6½ 6½ 14½			8½ 8½ 16½	8½ 9½ 18½
110°	N B L				6 6½ 12½	5½ 6½ 11½				7 7 14½			8½ 8½ 16	
112½°	N B L		5½ 5½ 11½			5½ 6½ 11½	5½ 6½ 11½	6½ 6½ 13½	6½ 6½ 12			9½ 8½ 17½		
115°	N B L	5½ 5½ 11½	6½ 5½ 12½	5½ 5½ 11½	7 6 11½		6½ 6½ 12½			7½ 7½ 15½				
120°	N B L	5½ 5½ 10½	6 6 12	6½ 5½ 12½	5½ 6 13	6½ 6½ 12½	6½ 6½ 12½	7½ 7½ 13½	7½ 7½ 14½	8 8 14½			9½ 9½ 16½	11 10½ 20
135°	N B L		7½ 7 12½	7 6½ 13	6½ 6½ 12½		7½ 7½ 13½	8 7½ 12½		9½ 9½ 15½				
147°	N B L			8½ 8½ 13½										

# RAIN-WATER DOUBLE BRANCHES



Double Branch Piece  
(Socket Branches)



FIG. 58

TABLE 30

Diameter D	1 $\frac{1}{2}$	2 $\frac{1}{2}$	3	4	5	6	8	10	12	14	16
S	28	28	28	28	28	28	28	34	44	54	64
Diameter D $\frac{1}{2}$	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$	3	4	5	6	8	10	12	14
S	24	24	24	24	24	24	24	24	24	24	24
105°	N				6 $\frac{1}{2}$	5 $\frac{1}{2}$	5 $\frac{1}{2}$	6 $\frac{1}{2}$		6 $\frac{1}{2}$	
	B				6 $\frac{1}{2}$	6	5 $\frac{1}{2}$	6 $\frac{1}{2}$		6 $\frac{1}{2}$	
	L				10 $\frac{1}{2}$	10 $\frac{1}{2}$	12 $\frac{1}{2}$	10 $\frac{1}{2}$		14 $\frac{1}{2}$	
110°	N			5 $\frac{1}{2}$							
	B			5 $\frac{1}{2}$							
	L			12 $\frac{1}{2}$							
112 $\frac{1}{2}$ °	N		5 $\frac{1}{2}$								
	B		5 $\frac{1}{2}$								
	L		12 $\frac{1}{2}$								
120°	N	5 $\frac{1}{2}$	6 $\frac{1}{2}$	6 $\frac{1}{2}$	5 $\frac{1}{2}$	6 $\frac{1}{2}$	6 $\frac{1}{2}$	6 $\frac{1}{2}$	7 $\frac{1}{2}$	8 $\frac{1}{2}$	13
	B	5 $\frac{1}{2}$	5 $\frac{1}{2}$	6 $\frac{1}{2}$	5 $\frac{1}{2}$	6 $\frac{1}{2}$	6 $\frac{1}{2}$	6 $\frac{1}{2}$	7 $\frac{1}{2}$	8 $\frac{1}{2}$	14
	L	11 $\frac{1}{2}$	10 $\frac{1}{2}$	12 $\frac{1}{2}$	11 $\frac{1}{2}$	12 $\frac{1}{2}$	13	12 $\frac{1}{2}$	13 $\frac{1}{2}$	14 $\frac{1}{2}$	2-8
135°	N									9 $\frac{1}{2}$	
	B									9 $\frac{1}{2}$	
	L									11 $\frac{1}{2}$	

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## RAIN-WATER INVERTED BRANCHES

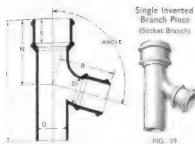


TABLE 31

Diameter D	in. 2½	in. 3	in. 4
S	2½	2½	3½
Diameter D'	2½	2½	2
S'	2½	2½	2½
N	6½	6½	6½
120° B	6	6½	6½
L	13½	13½	14½
N	5½		
135° B	7		
L	14½		

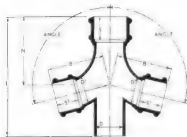


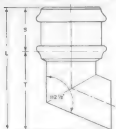
TABLE 32

Diameter D	in. 2½	in. 3	in. 4
S	2½	2½	3½
Diameter D'	2½	2½	2½
S'	2½	2½	2½
B	6		
110° B	5½		
L	13		
N	6	6½	6½
120° B	6½	6½	6½
L	13½	13½	14½



## RAIN-WATER SHOES

Shoes for Light Grade Pipes



Shoe

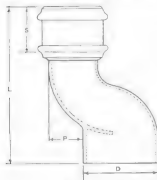


FIG. 61

TABLE 33

Nominal Size	in. 2½	in. 3	in. 4	in. 5	in. 6
S	2½	2½	2½	3½	3½
T	4	4½	5½	9½	11½
L	6½	7	8½	13½	15

Anti-Splash Shoes for Light Grade Pipes



Anti-Splash Shoe



FIG. 62

TABLE 34

Nominal Size	in. 2½	in. 3	in. 4	in. 5
S	2½	2½	3½	3½
P	3½	3	3½	3½
D	3½	4	5½	6½
L	9½	9½	12	13½

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## MISCELLANEOUS RAIN-WATER FITTINGS

Eaves Bend

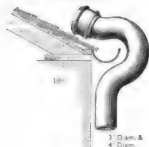


FIG. 63

Parallel Branch Piece  
(Socket Branch)



FIG. 65

Double Boot

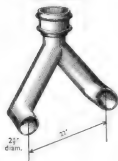


FIG. 67

Y Piece



4" & 2 1/2" Diam.

FIG. 64

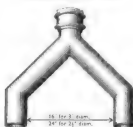
Curved Breeches Piece



3" Diam.  
2 1/2" Diam.

FIG. 66

Straight Breeches Piece



3" Diam.  
2 1/2" Diam.

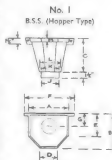
FIG. 68

## RAIN-WATER HEADS

**No. 1**  
B.S.S. (Mopier Type)



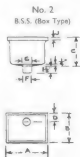
Nominal Size	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 5	in. 6
A	7½	7½	7½	9½	9½	10½	12
B	6½	6½	6½	8½	8½	9½	10½
C	7½	7½	7½	8	8	8½	9
D	3½	3½	3½	3½	3½	4½	5
E	4½	4½	4½	5½	5½	6½	7½
F	10½	10½	10½	12	12	13½	14½
G	2½	2½	2½	3½	3½	4½	4½
H	1½	2½	2½	3½	3½	4½	5½
J	2½	2½	3½	3½	4½	5½	6½
K	2½	2½	3½	3½	4½	5½	6½
L	3½	3½	3½	5	5	6	7
M	3	3	3	1	1	1½	1½



**No. 2**  
B.S.S. (Box Type)



Nominal Size	in. 2	in. 2½	in. 3	in. 3½	in. 4	in. 5	in. 6
A	10	10	10	12	12	12	12
B	7	7	7	10	10	10	10
C	7	7	7	8	8	8	8
D	2½	2½	2½	3½	3½	4½	4½
E	1½	2½	2½	3½	3½	4½	5½
F	2½	2½	3½	3½	4½	5½	6½
G	2½	2½	3½	3½	4½	5½	6½
J	2	2	2	1	1	1	1



**No. 1a Corner Heads**

**No. 1a**



Drop	A	B	C	Depth
1½	6½	8½	7	8
2	6½	9	7	7½
2½	7½	10½	8	8½
3	7½	11	8½	8½
3½	8½	12	9½	9½
4	8½	12	9½	9
4½	9½	13	10½	9½
5	9½	14	11	10½
6	11	15½	12½	10½

**No. 1a**  
Sizes in Table



**LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW**

## RAIN-WATER HEADS

\* Can be supplied without date or enrichments to order

No. 12



No. 15



No. 18



No. 32 and 32A



No. 45



No. 46  
Also Nos. 46A and P



No. 48



### PLANS OF CORNER HEADS

No. 12  
11 1/2" Deep



No. 15  
17 1/2" Deep



No. 18  
18" Deep



No. 45  
13" Deep



No. 46  
13" Deep



SIZES IN INCHES OF FLAT HEADS

No.	Outlet up to	Length	Length over base	Width over base	Depth of Box	Depth Castiron of Outlet
12	5	11	—	8 1/2	—	12
15	6	14	—	10 1/2	—	15
18	6 x 4	17 1/2	—	13 1/2	—	17 1/2
32	6 x 4	18 1/2	—	14 1/2	—	18 1/2
32A	6 x 3	17 1/2	—	13 1/2	—	17 1/2
45	4 1/2	11 1/2	—	7 1/2	—	4 1/2
46	4 1/2	11 1/2	—	7 1/2	—	4 1/2
46A	7	8	—	6	—	12
46P	4	10 1/2	—	7 1/2	—	12 1/2
48	4 1/2	14 1/2	—	9 1/2	—	16

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## RAIN-WATER HEADS

\* Can be supplied without enrichments to order

No. 70



No. 96



No. 163



No. 168  
Also No. 168B



No. 170



No. 175



No. 188



### PLANS OF CORNER HEADS

No. 70

15" Deep



No. 96

16 1/2" Deep



No. 195. Also No. 195A

Handed or Central



SIZES (IN INCHES) OF FLAT HEADS

No.	Outlet up to	Length	Length over Ears	Pro- jection	Depth of Box	Depth Square of Outlet
70	5	13	—	3 1/2	—	15 1/2
96	4 1/2	14	—	3 1/2	—	16 1/2
163	4	15	—	3 1/2	—	17 1/2
168	4	16	19	3	4 1/2	15 1/2
168B	4	16	19	3	4 1/2	15 1/2
170	4	15 1/2	—	3	—	16
175	4	12	—	3	—	12
188	4	18	—	3	—	18
195	3 1/2	20 1/2	—	3	4	10 1/2
195A	3 1/2	15 1/2	—	3 1/2	4	10 1/2

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## RAIN-WATER HEADS

No. 177  
Also Nos. 177A, B, C  
and E  
(Corner Head)



No. 196  
Also Nos. 196A and B  
(Handed or Central)



No. 201  
Also Nos. 201A, C, D  
and E (Corner Head)  
Handed or Central



No. 177D



No. 201B



## PLANS OF CORNER HEADS

No. 177  
12" Deep



No. 177E  
12" Deep



No. 201  
7 1/2" Deep



No. 201E  
7" Deep



## SIZES (IN INCHES) OF FLAT HEADS

No.	Outlet up to	Length	Length over Ears	Pro- jection	Depth of Box	Depth Exclusive of Outlet	No.	Outlet up to	Length	Length over Ears	Pro- jection	Depth of Box	Depth Exclusive of Outlet
177	3	11	13	5 1/2	7	2 1/2	201	3 1/2	18 1/2	22 1/2	7 1/2	—	7
177A	3 1/2	18 1/2	22 1/2	7 1/2	7 1/2	3 1/2	201A	4	11 1/2	15	6 1/2	—	7
177E	4	20	32	9	7 1/2	2 1/2	201B	4 1/2	28	29 1/2	9	—	13
177C	4 1/2	10 1/2	15 1/2	6 1/2	5	1 1/2	201C	5	10 1/2	14	8 1/2	—	6
177D	5	26	30 1/2	9	12 1/2	7 1/2	201D	5 1/2	10	22 1/2	8	—	7 1/2
196	4	12 1/2	—	7	—	6 1/2							
196A	5	18 1/2	—	7 1/2	—	9 1/2							
196B	4	24	—	7 1/2	—	9 1/2							

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## RAIN-WATER HEADS

\* Can be supplied without date or enrichments to order

No. 208  
Also Nos. 208A, F, H  
and J



No. 210

No. 208C  
Also Nos. 208E, K, L,  
O, P and R



No. 210A

No. 208B  
Also Nos. 208D, G, M,  
N, Q and S



No. 216



Any Crest to order

No. 226  
Also Nos. 226A and C



No. 231  
Also Nos. 231A, B and C



No.	Outlet ap. in.	Length	Length over Exit	Pro- jection	Depth of Box	Depth (exclusive of Outlet)	No.	Outlet ap. in.	Length	Length over Exit	Pro- jection	Depth of Box	Depth (exclusive of Outlet)
208	6	30	—	9	—	8	208B	6	35	—	12	—	16
208A	6	31	—	8	—	9	208C	6	36	—	15	—	20
208B	6	31	—	12	—	10	208D	6	36	—	15	—	20
208C	6	32	—	9	—	15	208E	6	35	—	10	—	15
208D	6	39	—	15	—	18	210	4 1/2	17 1/2	17 1/2	9	—	15
208E	6	35	—	9	—	18	210A	4	12 1/2	12 1/2	9	7 1/2	12
208F	6	38	—	15	—	9	216	5	18 1/2	—	9	—	20
208G	4	30	—	9	—	4	226	4	16	19	0	—	7
208H	6	34	—	9	—	7	226A	5	18	19	10	—	7
208I	6	38	—	9	—	2	231	3	11 1/2	11 1/2	10	—	5
208J	4	30	—	8	—	9	231A	8	19 1/2	—	13	9	9
208K	4	30	—	7	—	9	231B	6	24	—	11	0	20
208L	4	30	—	9	—	12	231C	6	24	—	11	12	12
208M	6	32	—	15	—	19							
208N	6	35	—	12	—	18							

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

# RAIN-WATER HEADS

\* Can be supplied without enrichments to order

No. 237  
Also No. 237A



No. 238



No. 239



No. 250



No. 246



No. 252



No. 242



No. 256



SIZES (IN INCHES) OF FLAT HEADS						
No.	Outlet to in.	Length	Length of Ears.	Pro- jection	Depth of Box	Depth of Outlet
237	4	15	—	7	9	10
237A	4	2	—	9	14	14
238	4	18½	21	7½	8	16½
239	4	16	—	10	9	17
242	4	15	—	20	20	14
246	6	23½	—	24	9	19
250	14	11	12	7	15½	20
252	2½	10½	12	20	15	20
256	5	20	23	0	—	21

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW



## RAIN-WATER HEADS

\* Can be supplied without enrichments to order

No. 258  
Also No. 258A



No. 268  
Also Nos. 268A and B  
Handed or Central



No. 267



No. 271



No. 274



No. 273  
Also Nos. 273A and B



No. 275



No. 281



SIZES (IN INCHES) OF FLAT HEADS

No.	Outlet up to	Length	Length over box	Pro- jector	Depth of Box	Depth (Exclusive of Outlet)
258	2½	18½	21	9½	7	14½
258A	3½	19½	24	8½	7	14½
267	4	18½	23	7	—	12
268	6	29	—	10½	—	12
268A	6	17	—	10½	—	12
268B	4½	22	—	7½	—	7
271	4	12	—	7	—	7½
273	4	11½	—	7	—	6½
273A	4	18	—	7	—	6½
274B	4	15	—	7	—	9
274	6	25	3	9½	—	15
275	3½	16½	22½	7½	7½	15
281	4	10½	15	7	12½	15½

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## RAIN-WATER HEADS

\* Can be supplied without date or enrichments to order

No. 283



No. 284



No. 285



No. 288  
Also No. 288A



No. 289



No. 290



No. 291



SIZES IN INCHES OF FLAT HEADS

No.	Outlet width	Length	Length over Ears	Pro- jection	Depth of Box	Depth between or Outlet
283	4	15	10	9 1/2	25	80
284	4	4	9	10	15 1/2	23 1/2
285	8	2 1/2	2 1/2	7	—	9
288	6	6 1/2	3	9 1/2	—	9
288A	6	3	4	10	—	7
289	6 1/2	25	18	11 1/2	14	85
290	4	3	5	6 1/2	7	10 1/2
291	4 x 3	18	13	10	14 1/2	25 1/2

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## RAIN-WATER HEADS

\* Can be supplied without enrichments to order

No. 292



No. 294



No. 296



No. 300  
Also No. 300A



No. 298



No. 297



Plans of Corner Heads  
No. 297  
(for External Corner)

8" Deep  
Right or Left Hand



SIZES (IN INCHES) OF FLAT HEADS

No.	Outlet up to	Length	Length over Ears	Projection	Depth of Box	Depth (Exclusive of Outlet)
291	4	15	27	9	33	29
294	4	12	17	4	9	17
296	6 x 4	26	30	9	8	13
297	4	24	—	7	—	8
298	4	17	23	8	—	12
300	6 x 3	18	24	10	16	24
300A	5 x 4	15	25	7	16	26

No. 300A

26" Deep



LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## RAIN-WATER HEADS

\* Can be supplied without enrichments to order

No. 304



No. 305



No. 306  
Also No. 306A



No. 307



No. 313



No. 313A



No. 309



SIZES (IN INCHES) OF FLAT HEADS

No.	Outlet dia. in.	Length	Length over Ears	Pro- jection	Depth of Bowl	Depth (Exclusive of Outlet)
304	3½	19	20	1½	14	11
305	4	20½	21	1½	14	11
306	5 x 4	21	21	1½	14	11
306A	4½ x 3½	18½	18½	1½	14	11
307	5	15	16	1½	14	11
309	2½	8	9	1½	14	11
313	4 x 3	15½	16½	1½	14	11
313A	4 x 3	15½	16½	1½	14	11

Plan of  
Corner Heads  
Nos. 306 and  
306A

Sizes in Table



SIZES (IN INCHES)

No.	Outlet dia. in.	A	B	C	Depth
306	4 x 4	13½	19	15½	21½
306A	4 x 4	12	17	14½	20½

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## RAIN-WATER HEADS

\* Can be supplied without enrichments to order

No. 314



No. 315



No. 316



No. 317



No. 318



No. 319



No. 320  
Also No. 320A



No.	Outlet up to	Length	Length over Flange	Projection	Height of box	Weight Approximate in Grams
314	4 x 3	18	20	8	7	14
315	4 x 3	22	25	9	7	18
316	4	22	25	10	—	21
317	4	25	27	10	5	24
318	4	22	27	6	5	22
319	4	20	—	8	80	18
320	4	22	27	6	—	22
320A	3	18	19	5	—	13

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## RAIN-WATER HEADS

\* Can be supplied without enrichments to order

No. 321



No. 322



No. 323



No. 328



No. 325



No. 326  
Also No. 326A



No. 329  
Also No. 329A



No.	Outlet in. to	Length	Length over flange	Pro- jection	Depth of Box	Depth (Exclusive of Outlet)
321	4	13½	10½	5½	14½	20½
322	4	20	17	5	15½	19
323	4	20	17	5	—	11
325	4 x 3	13½	10½	7	15½	20
326	5	24½	21½	7½	24	25½
326A	5	18	15	7½	7	10½
328	4 x 3	11	21	5	—	9
329	4	14	10½	5	6½	15
329A	4	14	10½	9½	6½	15

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## RAIN-WATER HEADS

\* Can be supplied without enrichments to order

No. 330



No. 331  
Also No. 331A



No. 332



No. 335  
Also No. 335A and 335B



No. 337



No. 336



No. 334



SIZES IN INCHES OF FLAT HEADS

No.	Outlet x D.	Length x D.	Length over Each	Sp. inches	Depth of Box	Depth of Outlet
330	6	24	—	12	7 1/2	20 1/2
331	3 1/2	12	14	7	—	7
331 A	3 1/2	10	12	7 1/2	—	7
332	4 x 4	15 1/2	18 1/2	8 1/2	18 1/2	27
334	4	24	27	18 1/2	18 1/2	4 1/2
335	4 1/2	10	12 1/2	7	—	7 1/2
332 A	5	15	18	8	—	8
335 A	5	12 1/2	15 1/2	8 1/2	—	8 1/2
335 B	4 x 4	12	16 1/2	7 1/2	—	16
337	4	13 1/2	17 1/2	9	—	20

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

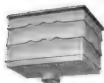
## RAIN-WATER HEADS

Supplied with date, where shown, unless otherwise ordered

\* Can be supplied without enrichments to order

No. 338

Also Nos. 338A, B, C,  
D and E



No. 339



No. 340



No. 344

Also No. 344B



No. 345



No. 347



No. 348



SIZES (IN INCHES) OF FLAT HEADS

No.	Outlet size	Length	Length over ears	Wid- th	Depth of Box	Depth Exclusive of Outlet
338	6	15½	—	9	—	20
338A	4	12½	—	7½	—	16
338B	4	6	—	9½	—	17
338C	6	42	—	9	—	10½
338D	6	42	—	9	—	10½
338E	6	24	—	9	—	10½
339	2	17	15½	6½	10½	15
340	4	36	15½	8	10	16
344	4	12	12½	7	—	4½
344B	4	12	12	7	—	4½
345	4	12½	16	9½	11	11½
347	1	15½	—	6½	—	9
348	3	9	20	8	10½	13

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW



## RAIN-WATER HEADS

\* Can be supplied without enrichments to order

No. 352A



No. 354



No. 355  
Also Nos. 355A and B



No. 358  
Also No. 358A



No. 356



No. 357



No. 359



SIZES (IN INCHES) OF FLAT HEADS

No.	Outlet Size	Length	Length over Ears	Pro 1813105	Depth of Box	Depth (Exclusive of Outlet)
352A	3/4	12	—	6	—	12
354	5/8	18	—	9	—	8
355	3/4	24	—	6	—	6
355A	4	18	—	6	—	6
355B	3/4	12	—	6	—	6
356	3/4	18	1 1/2	8 1/2	16 1/2	24 1/2
357	1	10	—	6	2	—
358	3/4	21	2 1/2	7	2	12
358A	3/4	29 1/2	3 1/2	7	—	12
359	3/4	14 1/2	19 1/2	8 1/2	7 1/2	12 1/2

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## RAIN-WATER HEADS

Supplied with date where shown, unless otherwise ordered

\* Can be supplied without enrichments to order

No. 362



No. 363



No. 364



No. 365  
Also No. 365A



No. 367A



No. 372  
Also No. 372A



No. 375  
Also No. 375A



Plan of Corner Head

No. 375

22½" deep



SIZES (IN INCHES) OF FLAT HEADS

No.	Outlet sq. in.	Length	Length over Ears	Pro- jection	Depth in Box	Depth Exclusive of Outlet
362	5	13	—	7½	—	19½
363	3	11½	—	6	—	9
364	4	15	18	7½	8	14
365	6	15	20½	5	—	10
365A	6	18	25	10	—	12
367A	4	12	18	8½	7½	11
372	4	24	26½	5	—	6
372A	4	18	19½	8	—	8
375	5 x 4	18	22½	9	14	23
375A	5 x 4	15	19½	7½	12	20

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## RAIN-WATER HEADS

No. 376



No. 377



No. 385



No. 388



No. 386



No. 390



No. 391  
Also No. 391A



SIZES (IN INCHES) OF RAIN-HEADS

No.	Outlet up to	Length	Length over Ears	Proj. Inches	Depth of Box	Depth of Outlet (if Outlet)
376	2	12	18	1	—	9
377	2 1/2	20	22	1 1/2	14	14
385	4	15	17	2	—	6 1/2
386	2 1/2	12	18	8	12	18
388	6	26	32	9	—	9
390	4 1/2	15	—	9	21	24
391	5	14	—	11	—	7
391A	5	14	—	9 1/2	—	7

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## RAIN-WATER HEADS

Supplied with date where shown, unless otherwise stated

\* Can be supplied without enrichments to order

No. 392



No. 396  
Also No. 396A



No. 394  
Also Nos. 394A, B, C and D



No. 399



No. 397  
Also No. 397A



No. 398



No. 400



SIZES IN INCHES OF FLAT HEADS

No.	Chimney width	Length	Length over Ears	Pro- jections	Depth of Box	Depth (Exclusive of Outlet)
392	6	14	—	5	20	23½
396	6	24	10	9½	6	5
396A	6	25	27	9½	5	5
396B	6	18	14	9½	6	6
396C	6	10	20	9½	5	5
396D	6	22	8	9½	6	5
399	3½	24	—	6	—	6
399A	3½	8	—	6	—	6
397	6	9	—	10½	16½	16½
397A	6	23	26½	2½	16½	16½
398	4	24½	—	—	8	10½
399	6	9	24½	10½	10	10½
400	6	12	14	9	—	24

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## RAIN-WATER HEADS

No. 401  
Also Nos. 401A, B, C  
and D



No. 402



No. 405



No. 406



No. 408



No. 414



No. 417



No. 424  
Also No. 424A



SIZES IN INCHES OF FLAT HEADS

No.	Outlet up to	Length	Length over ears	Pro- jection	Depth of Box	Depth (Excluding of Outlet)
401	4	18	23	6	6	10
401A	4	10	15	6	6	10
401B	4	21	25	6	6	10
401C	4	18	23	6	6	10
401D	4	7	12	6	6	10
402	4	12	16	7	10	18
405	4	12	16	7	10	18
406	4	12	16	7	10	18
408	4	18	23	6	6	10
414	4	18	23	6	6	10
417	4	24	30	11	—	—
424	4	26	30	11	—	—
424A	6	18	23	11	—	—

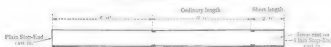
LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

# PLANS OF CAST-IRON GUTTERS AND CONNECTIONS TO ASSIST IN ORDERING

TYPICAL STRETCH OF No. 26 BOUNDARY WALL GUTTER.  
with outside joints on right hand

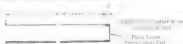


TYPICAL STRETCH OF ORNAMENTAL GUTTER.  
with inside joints on right hand.  
Front of gutter is denoted by double lines



The ordinary length of gutters is intended to be 6' 0" but this size may  
vary from 2' to 12' either way, and exact lengths can be obtained  
only from the castings-lead or pattern.

ORDINARY LENGTH WITH INSIDE STOP-END



LENGTH WITHOUT INSIDE OR OUTSIDE JOINTS



PLAIN STOP-ENDS

For Equal-Sided Gutters (see Nos. 1 and 2)



PLAIN STOP-ENDS

For Unequal-Sided Gutters (see Crest Ornamental Patterns)



Inside Joints, Right Hand



Outside Joints, Right Hand

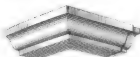
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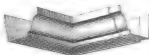
## ORNAMENTAL GUTTER CONNECTIONS

These can be supplied to suit most of the Gutters shown in Catalogue

External Angle



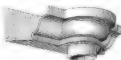
Internal Angle



Union Clip



Projecting Nozzle Piece



Nozzle Piece



Drop Cast-on Back



Drop Cast-on Corner



Ornamental Stop-Ends



Plain Stop-Ends

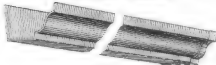


Above Connections are shown with inside joints at Right Hand

## TYPICAL ORNAMENTAL GUTTERS

6' 0" Joint to Joint

With Outside Joints at Right Hand



Outside joints give an uninterrupted water-way

With Inside Joints at Right Hand



Inside joints give, on the outside, an unbroken moulding

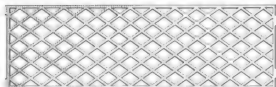
ION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW



## GUTTER GRATINGS

No. 136

Snow Gratings  
for Boundary-Wall and Valley Gutters



Flat Grating



SIZES

Width	Thickness	Length
6 $\frac{1}{2}$ "	x $\frac{1}{4}$ "	x 3' 10 $\frac{1}{2}$ "
8"	x $\frac{1}{2}$ "	x 3' 11"
9"	x $\frac{1}{2}$ "	x 3' 11"
10"	x $\frac{1}{2}$ "	x 4' 0"
11"	x $\frac{3}{8}$ "	x 3' 11"
11"	x $\frac{1}{2}$ "	x 4' 0"
13"	x $\frac{1}{2}$ "	x 4' 0"
13 $\frac{1}{2}$ "	x $\frac{1}{2}$ "	x 4' 0"

Width	Thickness	Length
14"	x $\frac{1}{2}$ "	x 4' 0"
15"	x $\frac{1}{2}$ "	x 4' 0"
16"	x $\frac{1}{2}$ "	x 4' 0"
16 $\frac{1}{2}$ "	x $\frac{1}{2}$ "	x 4' 0"
18 $\frac{1}{2}$ "	x $\frac{1}{2}$ "	x 4' 0"
24"	x $\frac{1}{2}$ "	x 3' 1 $\frac{1}{2}$ "

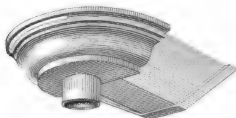
Cambered Grating



SIZES

Width	Thickness
8"	x $\frac{1}{2}$ "
9"	x $\frac{3}{8}$ "
9"	x $\frac{1}{2}$ "

Ornamental Nozzle-End  
for Valley Gutter



Supplied with or without overflow  
and to suit any  
Valley Gutter in Catalogue  
up to 21" x 6"

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## HOPPER OUTLETS FOR GUTTERS

No. 1



Dim. x 13" Diam. Flange  
12" High,  $\frac{1}{2}$ " Thick  
Dim. x 11" Diam. Flange  
12" High,  $\frac{1}{2}$ " Thick

No. 2



4" Diam. x 12" x 8" Flange  
10 $\frac{1}{2}$ " High,  $\frac{1}{8}$ " Thick  
4" Diam. x 15 $\frac{1}{2}$ " x 12" Flange  
9" High,  $\frac{1}{2}$ " Thick

No. 3



4" Diam. x 11" Diam. Flange  
15 $\frac{1}{2}$ " Tail from Centre  
 $\frac{1}{8}$ " Thick

No. 4



Dim. x 10 $\frac{1}{2}$ " Diam. Flange  
15 $\frac{1}{2}$ " High  
 $\frac{1}{8}$ " Thick

No. 5

with 4 $\frac{1}{2}$ " Diam. Grating



3" Diam. x 12" Diam. Flange  
9" High,  $\frac{1}{8}$ " Thick

No. 6



4" Diam. x 12" Diam. Flange  
10 $\frac{1}{2}$ " High,  $\frac{1}{2}$ " Thick

## HOPPER OUTLETS FOR GUTTERS

No. 7



13½" Diam. Flange, 9½" High  
4" and 6" Diam., ½" Thick  
16" Diam. Flange, 9" High  
8" Diam., ½" Thick

No. 8



6" Diam. x 1" 12" x 1½" Flange  
8" High x ½" Thick

No. 9



9" Diam. x 1" 3" x 1" 0" Flange  
1" 0" High x ½" Metal



## GUTTER GRATES

No. 1



No. 2



No. 3



No. 4



No. 5



No. 6



No. 7



No. 8



No. 10



No. 11



LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## MILD STEEL GUTTER BRACKETS

No. 15



No. 24



No. 25



No. 26



No. 30



No. 18



No. 19



No. 16



No. 27



No. 29



No. 17



No. 32  
for side fixing



No. 33  
for top fixing



No. 28



All the above Brackets to suit any Half-Round or Ornamental Gutter in Catalogue

ION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

# CAST-IRON GUTTER BRACKETS

No. 3



No. 11



No. 12



No. 13



No. 22



No. 6



No. 20



No. 21



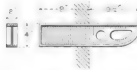
No. 23



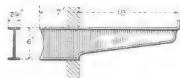
No. 141



No. 147



No. 142



No. 176



LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## HALF-ROUND GUTTERS

No. 1. Plain Half-Round



SIZE

3"	6" x $\frac{1}{16}$ "
3" x $\frac{1}{16}$ "	6" x $\frac{1}{8}$ "
3" x $\frac{1}{8}$ "	7" x $\frac{1}{16}$ "
3½"	8"
3½" x $\frac{1}{16}$ "	8" x $\frac{1}{16}$ "
3½" x $\frac{1}{8}$ "	8" x $\frac{1}{8}$ "
4"	9"
4" x $\frac{1}{16}$ "	9½"
4" x $\frac{1}{8}$ "	9½" x $\frac{1}{8}$ "
4½"	9½" x 4½" x $\frac{1}{8}$ "
4½" x $\frac{1}{16}$ "	10"
4½" x $\frac{1}{8}$ "	10" x $\frac{1}{16}$ "
5"	12" x 5" x $\frac{1}{16}$ "
5" x $\frac{1}{16}$ "	13" x 6" x $\frac{1}{8}$ "
5" x $\frac{1}{8}$ "	13½" x 5½" x $\frac{1}{16}$ "
5" x $\frac{1}{4}$ "	

No. 20. Deep Half-Round



SIZE

3"	3" x 2½" x $\frac{1}{16}$ " I.J.
3½"	3½" x 3½" x $\frac{1}{16}$ " I.J.
4"	4" x 2½"
4"	4" x 3"
4"	4" x 3" x $\frac{1}{16}$ "
4"	4" x 3" x $\frac{1}{16}$ " I.J.
4½"	4½" x 2½" x $\frac{1}{8}$ " I.J.
4½"	4½" x 3"
4½"	4½" x 3" x $\frac{1}{16}$ "
4½"	4½" x 3" x $\frac{1}{16}$ " I.J.
4½"	4½" x 3½"
4½"	4½" x 3½" I.J.
4½"	4½" x 3½" x $\frac{1}{16}$ " I.J.
4½"	4½" x 3½" x $\frac{1}{8}$ "
4½"	4½" x 3½" x $\frac{1}{8}$ " I.J.
4½"	4½" x 4"
4½"	4½" x 4½"
5"	5" x 3"
5"	5" x 3" I.J.
5"	5" x 3" x $\frac{1}{16}$ "
5"	5" x 3" x $\frac{1}{16}$ " I.J.
5"	5" x 3" x $\frac{1}{8}$ "
A5"	5" x 3½"
A5"	5" x 3½" x $\frac{1}{16}$ " I.J.
B5"	5" x 4"
B5"	5" x 4" x $\frac{1}{16}$ "
A5"	5" x 4" x $\frac{1}{16}$ " I.J.
5"	5" x 4½" x $\frac{1}{16}$ "
5"	5" x 5" x $\frac{1}{16}$ " I.J.
5½"	5½" x 4"
6"	6" x 3½"
6"	6" x 3½" x $\frac{1}{16}$ " I.J.
A6"	6" x 4" x $\frac{1}{16}$ "
A6"	6" x 4" x $\frac{1}{16}$ " I.J.
A6"	6" x 4" x $\frac{1}{8}$ "
C6"	6" x 4"
6"	6" x 5" x $\frac{1}{16}$ "
7"	7" x 5" x $\frac{1}{8}$ "
A8"	8" x 5"
8"	8" x 6" x $\frac{1}{16}$ "
9"	9" x 6" x $\frac{1}{16}$ "
10"	10" x 7" x $\frac{1}{16}$ "
12"	12" x 7" x $\frac{1}{8}$ "

No. 2. Beaded Half-Round



SIZE

3"	D5"
3" x $\frac{1}{16}$ "	5" x $\frac{1}{16}$ "
3½"	5" x $\frac{1}{8}$ "
3½" x $\frac{1}{16}$ "	5" x $\frac{1}{4}$ " I.J.
4"	5½" x 2½" x $\frac{1}{8}$ " I.J.
D4"	6"
4" x $\frac{1}{16}$ "	6" x $\frac{1}{16}$ "
4" x $\frac{1}{8}$ "	6" x $\frac{1}{8}$ "
4½"	7"
4½" x $\frac{1}{16}$ "	8"
4½" x $\frac{1}{8}$ "	9" x $\frac{1}{4}$ "
5"	

Gutters with Outside Joints except where marked I.J.

Full-size sections on application

ION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## HALF-ROUND GUTTERS

No. 20. Deep Half-Round



SIZE

4" x 3½" x ⅜"  
 4½" x 3" x ⅜"  
 A4½" x 2½" I.J.  
 A5" x 3" I.J.  
 5" x 3½"  
 5" x 3½" I.J.  
 5" x 3½" x ⅜"  
 5" x 3½" x ½"  
 5" x 3½" x ½" I.J.  
 5½" x 3" x ⅜" I.J.

AS½" x 4" x ⅜"  
 BS½" x 4" x ⅜" I.J.  
 6" x 4" I.J.  
 6" x 4" x ⅜"  
 B6" x 4" x ½"  
 B6" x 4" x ½" I.J.  
 6" x 4½" x ½"  
 6½" x 3" x ½"  
 10" x 6"

No. 20. Deep Half-Round



SIZE

A4" x 3" x ⅜"  
 A4½" x 3" x ⅜"  
 4½" x 2½" x ½"  
 B5" x 3" x ⅜"  
 B5" x 3½" x ⅜"  
 5½" x 2½" x ½"  
 A6" x 3" x ½"  
 A6" x 3½" x ⅜"  
 6½" x 4" x ⅜"

No. 20E. Deep Half-Round

SIZE

4" x 3" x ⅜" I.J.  
 4½" x 3½" x ⅜" I.J.  
 5" x 3½" x ⅜" I.J.  
 5" x 4" x ⅜" I.J.



No. 20. Deep Half-Round.



SIZE

3½" x 2½" x ⅜" I.J.  
 4½" x 2½" x ½"  
 A4½" x 3½" x ⅜"  
 4½" x 3"  
 4½" x 3½"  
 C5" x 4"  
 C5" x 4" x ⅜"  
 D5" x 4" x ⅜" I.J.  
 C5" x 4" x ½"  
 5½" x 2½" x ⅜"  
 5½" x 3½" x ⅜"  
 7" x 4" x ⅜"  
 B" x 5"

No. 20. Deep Half-Round

SIZE

5" x 4" I.J.  
 5" x 4" x ⅜" I.J.  
 5" x 4" x ½" I.J.



No. 20. Deep Half-Round

SIZE

6" x 3" x ½"



Gutters with Outside Joints except where marked I.J.

Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## O.G. GUTTERS

With Outside Joints, except where marked I.J.

No. 3 O.G.



SIZE

B3" R.H. & L.H.  
J 3" L.H.  
3½"  
B3½" L.H.  
J 3½" R.H. & L.H.  
L3½" x 2½"  
4"  
A4"  
B4" R.H. & L.H.  
C4" R.H. & L.H.  
D4" x 2½" L.H.  
H4" L.H.  
J 4" R.H. & L.H.  
4" x ½" R.H. & L.H.  
4½"  
B4½" R.H. & L.H.  
C4½" x 2½"  
4½" x 2½"  
G4½" L.H.  
H4½" L.H.  
J 4½" R.H. & L.H.  
L4½" x 2½"  
A4½" x ½" R.H. & L.H.  
5"  
B5" L.H.  
G5" L.H.  
H5" L.H.  
J 5" R.H. & L.H.  
A5" x ½" R.H. & L.H.  
5" x 2½" x ½"  
5" x 3"  
A5" x 3"  
5" x 3½" L.H.  
5" x 3½" I.J., R.H.  
5½" x 2½"  
6"  
B6" L.H.  
J 6" L.H.  
A6" x ½"  
6" x 3½" L.H.  
6" x 3½"  
6" x 4" L.H.  
K6" x 4"

No. 4 O.G.



SIZES

as for No. 3

No. 19 (Notts O.G.)



SIZE

A3" L.H.  
A4" L.H.  
A4½" L.H.  
A4½" x 2½"  
A4½" x 3" L.H.  
N4½" x 3" L.H.  
A5" L.H.  
A6" x 4" R.H. & L.H.  
N6" x 4" L.H.  
A7½" x 5" L.H.

Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

Full-size sections on application

ION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW



## MOULDED GUTTERS

With Inside Joints except where marked O.J.

No. 6



SIZE

$4\frac{1}{2}" \times 4\frac{1}{2}"$  L.H.  
 $4\frac{1}{2}" \times 3\frac{1}{2}"$   
 $5\frac{1}{2}" \times 5\frac{1}{2}" \times \frac{1}{4}"$   
 $7" \times 6" \times \frac{1}{4}"$   
 $8\frac{1}{2}" \times 7" \times \frac{1}{4}"$   
 $9" \times 5"$   
 $9" \times 7\frac{1}{2}"$  L.H.  
 $10" \times 6" \times 7\frac{1}{2}"$   
 at front  $\times \frac{1}{4}"$

No. 6



SIZE

$5\frac{1}{2}" \times 4"$   
 $5\frac{1}{2}" \times 4" \times \frac{1}{4}"$

No. 6



SIZE

$6" \times 5" \times 4\frac{1}{2}"$   
 at front  $\times \frac{1}{4}"$   
 $A 9" \times 6" \times \frac{1}{4}"$

No. 6



SIZE

$3\frac{1}{2}" \times 2\frac{1}{2}"$		$7" \times 4"$
$4" \times 3" \times \frac{1}{8}"$		$7" \times 5"$
$4\frac{1}{2}" \times 3\frac{1}{2}"$		$7" \times 5" \times \frac{1}{8}"$
$B 4\frac{1}{2}" \times 3\frac{1}{2}"$ L.H.		$7\frac{1}{2}" \times 5"$
$K 4\frac{1}{2}" \times 3\frac{1}{2}"$ L.H.		$7\frac{1}{2}" \times 5" \times \frac{1}{4}"$
$4\frac{1}{2}" \times 3\frac{1}{2}" \times \frac{1}{4}"$		$7\frac{1}{2}" \times 6"$
$5" \times 4" \times \frac{1}{4}"$ L.H.		$8" \times 6"$
$A 5" \times 4" \times \frac{1}{4}"$ L.H.		$8" \times 6" \times \frac{1}{4}"$
$B 5" \times 4" \times \frac{1}{4}"$ L.H.		$8" \times 6" \times \frac{1}{4}"$
$5" \times 4" \times \frac{1}{4}"$		$9" \times 4\frac{1}{2}" \times \frac{1}{4}"$
$6" \times 4"$		$9" \times 4\frac{1}{2}" \times \frac{1}{4}"$
$6" \times 4" \times \frac{1}{4}"$		$9" \times 6"$
$6" \times 4" \times \frac{1}{4}"$ O.J.		$9" \times 6" \times \frac{1}{4}"$
$6" \times 4" \times \frac{1}{4}"$		$9" \times 6\frac{1}{2}" \times \frac{1}{4}"$
$6" \times 4\frac{1}{2}"$		$10" \times 6"$
$A 6" \times 4\frac{1}{2}"$	Also L.H.	$10" \times 6" \times \frac{1}{4}"$
$B 6" \times 4\frac{1}{2}"$		$10" \times 7\frac{1}{2}"$
$6" \times 4\frac{1}{2}" \times \frac{1}{4}"$		
$6" \times 4\frac{1}{2}" \times \frac{1}{4}"$		
$6" \times 6"$		
$6" \times 6" \times \frac{1}{4}"$		
$6\frac{1}{2}" \times 5" \times 4\frac{1}{2}"$		
at front		

No. 7



SIZE

$5" \times 4\frac{1}{2}"$

No. 7



SIZE

$7\frac{1}{2}" \times 6"$

Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## MOULDED GUTTERS

With Inside Joints except where marked O.J.

No. 8



SIZE

3" x 2½"  
4" x 2½"  
4" x 3" x ⅛"  
4½" x 2½"  
4½" x 3"  
4½" x 3" x ⅛"  
A4½" x 4"  
4½" x 4"  
4½" x 3"  
4½" x 4"  
4½" x 4" x ¼"  
4½" x 4" x ⅛"  
5" x 3½"  
A5" x 3½" x ⅛"  
A5" x 3½" x ⅛" O.J.  
5" x 4"  
A5" x 4"  
5" x 4" x ⅛"  
5" x 4" x ¼"  
5" x 5"  
5½" x 4"  
5½" x 4½" x ⅛"  
5½" x 3½" x ⅛"  
5½" x 4"  
5½" x 4½" x 6½"  
at front x ⅛"  
5½" x 3½"

6" x 4"  
6" x 4" O.J.  
6" x 4" x ⅛"  
6" x 4" x ¼"  
6" x 4½"  
A6" x 5" x ⅛"  
6" x 5" x ¼"  
6½" x 5" x ⅛"  
6½" x 4½"  
7" x 5" x ⅛" O.J.  
8" x 5"  
8" x 5" x ⅛"  
8" x 5" x ¼"  
A8" x 5" x ¼"  
8½" x 5½" x ¼" L.H.  
8½" x 6½" x ⅛" O.J.  
8½" x 4½" x ¼"  
9" x 5"  
9" x 5½"  
A9" x 5½" x ¼"  
9" x 6"  
A9" x 6" x ⅛" O.J.  
9½" x 6" x ¼"  
10" x 5" x ¼"  
10" x 8" x ¼"  
11" x 6" x ⅛"  
11" x 6" x ¼"

No. 8



SIZE

6" x 3½" x ⅛"  
6" x 4½" x ¼"

No. 9



SIZE  
5½" x 3½"

No. 9



SIZE  
5½" x 4½"

No. 9



SIZE  
5" x 4½" x ¼"

No. 9



SIZE

A4" x 3"  
4½" x 3½"  
A5" x 4" x ⅛"  
6" x 4"  
6" x 4" O.J.  
6" x 4" x ¼" O.J.  
6" x 5" x ¼"  
6" x 5" x ⅛" O.J.  
6½" x 5" x ¼" O.J.  
6½" x 3½"  
6½" x 4" x ¼"  
6½" x 4" x ⅛" O.J.  
6½" x 3½"  
7" x 4" x ⅛"  
7" x 5½"  
8" x 4"  
10" x 6" x ⅛"

Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

Full-size sections on application

ION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## MOULDED GUTTERS

With Inside Joints except where marked O.J.

No. 10



SIZE

4" x 3"  
4" x 3" O.J.  
5" x 2½"  
5" x 3½"  
A 5" x 4"  
5" x 4½"  
5½" x 3½" O.J.  
5½" x 3½" x ⅜"

6" x 3"  
6" x 3" O.J.  
6" x 3" x ¼"  
6" x 4"  
6" x 4½" x ⅜" O.J.  
6" x 5"  
7½" x 3½"  
7½" x 3½" x ¼"

No. 12



SIZE

13½" x 5½" x ¼"

No. 12



SIZE

4½" x 3½" x ⅜"  
6½" x 3½" x ⅜"

No. 10



SIZE

7" x 5" x ⅜"

No. 12



SIZE

4½" x 3½"  
4½" x 3½" x ⅜"  
6½" x 4½" x ⅜"  
5½" x 3"

6" x 4½"  
6" x 4½" x ⅜"  
6" x 5" x ⅜"  
6½" x 5" x ⅜"  
6½" x 5½"

7" x 5"  
7" x 5" x ⅜"  
8" x 6"  
8" x 4½" x ⅜"  
10" x 6"  
10" x 6" x ⅜"

A 10" x 6" O.J.  
10" x 8" x ⅜"  
11½" x 6" x ⅜"

No. 12



SIZE

5" x 4"  
A 5" x 4" x ¼"  
5½" x 4½"  
7½" x 6½"  
7½" x 6½" x ¼"

No. 13



SIZE

6½" x 4" x ⅜"

Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## DEEP O.G. GUTTERS

With Inside Joints except where marked O.J.

No. 19 Deep O.G.



3" x 2"  
3½" x 2"  
4" x 2" O.J.  
4" x 2" O.J.  
C4" x 2" O.J., L.H.  
4" x 3"  
4" x 3" O.J.  
C4" x 3" O.J.  
4" x 3" x ½"  
4½" x 2½" O.J.  
4½" x 2½" x ½"  
4½" x 3"  
4½" x 3" O.J.  
4½" x 3" x ½"  
4½" x 3" x ½" O.J.  
4½" x 3" x ½" O.J.  
B4½" x 3" x ½"  
4½" x 3" x ½"  
4½" x 3" x ½"  
5"  
B5" x 3"  
5" x 3" x ½" O.J.  
5" x 4"  
5" x 4" O.J.  
D5" x 4" O.J., L.H.  
5" x 4" x ½"  
B5" x 4" L.H.  
C5" x 4" x ½"  
5" x 4" x ½" O.J.  
7½" x 4" x ¾"  
at front x ½"  
5" x 5" x ½"

SIZE  
5½" x 3½" x ½"  
5½" x 3½"  
5½" x 3" O.J.  
5½" x 3½"  
5½" x 4"  
5½" x 3½" x ½"  
5½" x 3½" x ½" O.J.  
6" x 3½" x ½" O.J.  
B6" x 3½"  
6" x 4"  
C6" x 4" O.J.  
6" x 4" x ½"  
B6" x 4" x ½" O.J.  
6" x 4½" x ½"  
6" x 4½" x ½"  
6" x 5"  
6" x 5" O.J.  
6" x 5" x ½" O.J.  
6" x 5½" x ½" O.J.  
6" x 7"  
6½" x 3½" x ½"  
6½" x 4½" x ½"  
6½" x 4½"  
6½" x 5"

6½" x 4" x ½"  
6½" x 4" x ½"  
6½" x 5"  
7" x 4"  
17" x 4" x ¾"  
at front x ½"  
7" x 5"  
C7" x 5"  
B7" x 5" x ½" O.J.  
7" x 6"  
7" x 6" x ½"  
B7" x 6" x ½"  
7½" x 3½" x ½"  
8" x 4"  
B8" x 4" x ½" L.H.  
with drip on front  
8" x 5"  
B8" x 5" x ½"  
8" x 5½" x ½"  
at front x ½"  
8" x 6" x ½"  
8" x 6" x ½" O.J.  
9" x 5" x ½" O.J.  
9" x 7" x ½"  
9½" x 5"  
10" x 6"  
10½" x 6½" x ½"  
11" x 5"  
12" x 7" x ½" O.J.

No. 19 Deep O.G.



SIZE

D6" x 4" L.H.

No. 19 (Notts O.G.) O.J.



SIZE

A3" L.H.  
A4" L.H.  
A4½" L.H.  
A4½" x ¾"  
A4½" x 3" L.H.  
N4½" x 3" L.H.

A5" L.H.  
A6" x 4" L.H.  
N6" x 4" L.H.  
A 7½" x 5" L.H.

No. 19A (Notts O.G.)



SIZE

6½" x 4½" x ¾" O.J., R.H.

Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

Full-size sections on application

ION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## MOULDED GUTTERS

With Inside Joints except where marked O.J.

No. 29



SIZE

$4\frac{1}{2}'' \times 3'' \times \frac{1}{8}''$   
 $4\frac{1}{2}'' \times 3'' \times \frac{1}{8}''$   
 $5'' \times 4'' \times \frac{1}{8}''$   
 $5'' \times 4'' \times \frac{1}{8}''$   
 $5'' \times 4\frac{1}{2}'' \times \frac{1}{8}''$   
 at front  $\times \frac{3}{16}''$   
 $5\frac{1}{2}'' \times 4\frac{1}{2}'' \times \frac{1}{8}''$   
 $5\frac{1}{2}'' \times 4\frac{1}{2}'' \times \frac{1}{8}''$   
 $5\frac{1}{2}'' \times 4'' \times \frac{1}{8}''$   
 $6'' \times 3\frac{1}{2}'' \text{ O.J.}$   
 $6'' \times 4'' \times \frac{1}{8}''$   
 $6'' \times 4\frac{1}{2}'' \times \frac{1}{8}''$   
 $7'' \times 6'' \times \frac{1}{8}''$

No. 29



SIZE

4 $\frac{1}{2}$ "	x	4"	x	$\frac{3}{16}$ "
5"	x	3 $\frac{1}{2}$ "	x	$\frac{3}{16}$ "
A5"	x	3 $\frac{1}{2}$ "	x	$\frac{3}{16}$ "
6"	x	5"		
6"	x	6"	x	$\frac{3}{16}$ "
6"	x	8"	x	$\frac{3}{16}$ "

No. 29A



SIZE  
4½" x 4"

No. 29A



SIZE

$$6'' \times 4\frac{1}{2}'' \times \frac{3}{4}''$$

No. 29



SIZE

5½" x 4½" x 1½"

No. 29A



SIZE

5½" x 4½"

No. 34



SIZE

A4	$\times 3$	$\times \frac{1}{3}$	O.J.
4	$\times 3$	$\times \frac{1}{3}$	
4	$\times 3$	$\times \frac{1}{3}$	
4	$\times 3$	$\times \frac{1}{3}$	O.J.
4	$\times 4$	$\times \frac{1}{4}$	O.J.
4	$\times 4$	$\times \frac{1}{4}$	
5	$\times 4$	$\times \frac{1}{4}$	
6	$\times 5$	$\times \frac{1}{5}$	
6	$\times 5$	$\times \frac{1}{5}$	
B6	$\times 5$	$\times \frac{1}{5}$	
A6	$\times 5$	$\times \frac{1}{5}$	O.J.
10	$\times 5$	$\times \frac{1}{5}$	

No. 34



Note.—The following gutters can be used also as Trough Boundary-Wall Gutters.  
See page 97.

SIZE

3'	x 2'	O.J.	19'	x 5'	x 4 1/2'
4'	x 3'			lat front	
4'	x 3'	x 1/2'	The following Gutters have		
4'	x 3'	O.J.	O.J., L.H. looking at sun		
4'	x 4'		right side of Gutter except		
4'	x 4'	x 1/2'	where marked otherwise		
5'	x 3'		9'	x 6'	x 1/2'
5'	x 3'	x 1/2' O.J.	10'	x 8'	
5'	x 4'		10'	x 8'	x 1/2' O.J., R.H.
5'	x 4'	x 1/2' O.J.	11'	x 4 1/2'	x 1/2' L.L. R.H.
5'	x 4'		11'	x 4 1/2'	x 1/2' L.L. R.H.
5 1/2'	x 4'	x 1/2'	11'	x 6'	x 1/2' L.L.
	lat front = 1/2'		12'	x 6'	x 1/2' L.L.
6'	x 4'		12'	x 7'	x 1/2'
6'	x 4 1/2'	1/2'	13 1/2'	x 7'	x 1/2'
6'	x 5'		14'	x 5'	
6 1/2'	x 4 1/2'	x 1/2'	14 1/2'	x 7'	x 1/2'
6 1/2'	x 5'	x 1/2'	A16' x 7' x 10' sole x.		
7'	x O.J.		L.L., R.H.		
7'	x O.J.		16'	x 7'	x 1/2' L.L.
7'	x 5'	x 1/2'	16'	x 7'	x 1/2' O.J., R.H.
7 1/2'	x 5'	O.J.	18'	x 9'	
8'	x 7'	x 1/2'	21'	x 6'	x 1/2' sole x.
			O.J., R.H.		

Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## MOULDED GUTTERS

With Inside Joints except where marked O.J.

No. 36



SIZE

$4\frac{1}{2}" \times 4"$   
 $4\frac{1}{2}" \times 4" \times \frac{1}{4}"$   
 $5" \times 3" \times \frac{1}{4}"$   
 $5" \times 3\frac{1}{2}" \times \frac{1}{4}"$   
 $5\frac{1}{2}" \times 4" \times \frac{1}{4}"$   
 $6" \times 5"$   
 $6\frac{1}{2}" \times 5"$   
 $7" \times 4\frac{1}{2}"$   
 $7" \times 6" \times \frac{1}{4}"$

No. 40



SIZE

$4\frac{1}{2}" \times 3\frac{1}{2}"$   
 $5" \times 4"$   
 $6\frac{1}{2}" \times 4\frac{1}{2}"$   
 $7" \times 3\frac{1}{2}"$   
 $7\frac{1}{2}" \times 4\frac{1}{2}"$   
 $8" \times 6"$   
 $9" \times 4\frac{1}{2}"$   
 $9" \times 6"$

No. 41



SIZE

$4\frac{1}{2}" \times 3"$   
 $6" \times 4"$   
 $8" \times 5" \times \frac{1}{4}"$   
 $8" \times 6"$   
 $9" \times 5"$

No. 36



$6\frac{1}{2}" \times 5" \times \frac{1}{4}"$

No. 40



SIZE

$5\frac{1}{2}" \times 3\frac{1}{2}"$   
 $5\frac{1}{2}" \times 4\frac{1}{2}" \times 3\frac{1}{2}"$   
 1 at front  
 $6\frac{1}{2}" \times 5"$   
 $8" \times 5" \times \frac{1}{4}"$

No. 41



SIZE

$6\frac{1}{2}" \times 3\frac{1}{2}" \times \frac{1}{4}"$

No. 39



$6\frac{1}{2}" \times 4"$

No. 41



SIZE

$9\frac{1}{2}" \times 6" \times \frac{1}{4}"$  O.J.

No. 41



SIZE

$5" \times 4"$  O.J.

Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

Full-size sections on application

ION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

# MOULDED GUTTERS

With Inside Joints except where marked O.J.

No. 42



## SIZE

3½" x 2"  
 3½" x 2" O.J., L.H.  
 3½" x 3"  
 4" x 2½"  
 4" x 2½" O.J.  
 4" x 2½" x ½"  
 4" x 3"  
 B4" x 3" L.H.  
 N4" x 3" L.H.  
 4" x 3" x ½"  
 4" x 3" x ½" O.J.  
 4" x 3½"  
 4½" x 3"  
 4½" x 2½" x ½"  
 C4" x 3"  
 D4" x 3"  
 D4" x 3" O.J.  
 4½" x 3" x ½"  
 4½" x 3" x ½" O.J.  
 A4" x 3½" x ½" O.J.  
 4½" x 3½"  
 S5" x 3"  
 S5" x 3" x ½"  
 AS" x 3" x ½"  
 5" x 3½"  
 5" x 3½" x ½"  
 5" x 4"  
 5" x 4" O.J.  
 AS" x 4"  
 B5" x 4" L.H.  
 D5" x 4" L.H.  
 F5" x 4" L.H.  
 K5" x 4"  
 N5" x 4" L.H.  
 5" x 4" x ½"  
 5" x 4" x ½" O.J.  
 5" x 4" x ½"  
 O.J., L.H.  
 5" x 4" x ½" O.J.  
 K5" x 4" x ½"  
 5" x 4½"  
 5" x 4½" O.J., L.H.  
 5" x 4½"  
 5" x 4½" x 4"  
 at front O.J.  
 5½" x 4½" x ½"  
 5½" x 4½" O.J., L.H.  
 5½" x 4"  
 5½" x 4" O.J.

5½" x 4" x ½"  
 5½" x 4½"  
 5½" x 4½" x ½"  
 5½" x 4½" x ½"  
 5½" x 4" L.H.  
 B5½" x 4" L.H.  
 6" x 3½"  
 6" x 3½" O.J.  
 A6" x 3½" x ½"  
 6" x 4"  
 6" x 4" O.J.  
 GD6" x 4" L.H.  
 6" x 4" x ½"  
 C6" x 4" x ½"  
 6" x 4" x ½"  
 6" x 4" x ½"  
 6" x 4½" x ½"  
 6" x 4½" x ½" O.J.  
 6" x 4½" x ½" O.J.  
 6" x 4½" x ½" O.J.  
 6" x 4½" L.H.  
 6" x 5"  
 6" x 5" O.J., L.H.  
 6" x 5" x ½"  
 6" x 5" x ½"  
 6" x 5½"  
 6" x 5½" x ½" O.J.  
 6" x 5½" x ½" O.J.  
 6" x 6" x ½" O.J.  
 6½" x 4½" O.J.  
 6½" x 4½" x ½"  
 6½" x 4½" x ½"  
 6½" x 4½" x ½"  
 A6½" x 4½" x ½"  
 6½" x 4½" x ½"  
 6½" x 5½" x ½"  
 6½" x 5½" x ½"  
 6½" x 5½" x ½" O.J.  
 B7" x 4" L.H.  
 D7" x 4"  
 7" x 4½"  
 7" x 4½" x ½"  
 A7" x 4½" x ½"  
 7" x 4½" x ½" L.H.  
 7" x 5"  
 7" x 5" O.J.

7" x 5" O.J., L.H.  
 7" x 5½" x ½"  
 C7" x 5½" x ½"  
 7" x 5½" x ½"  
 A7" x 5½" x ½" O.J., L.H.  
 B7" x 5½" x ½"  
 7" x 5½" x ½" O.J.  
 7" x 6"  
 7" x 6" x ½"  
 7" x 8" x ½"  
 7½" x 4"  
 7½" x 4" x ½"  
 7½" x 5"  
 7½" x 5" x ½"  
 7½" x 5½"  
 8" x 4½"  
 A8" x 4½" x ½" x ½"  
 8" x 4½" x ½" x ½" O.J.  
 8" x 4½" x ½"  
 8" x 5"  
 8" x 5" x ½"  
 A8" x 5" x ½"  
 8" x 5" x ½"  
 8" x 6"  
 8" x 6" O.J.  
 8" x 6" x ½"  
 8" x 6" x ½"  
 8" x 6½" x ½"  
 8½" x 5½"  
 B8½" x 4"  
 8½" x 5½" x ½"  
 B8½" x 5½" x ½"  
 9" x 5½" x ½"  
 9" x 6"  
 9" x 6" x ½"  
 9" x 6" x ½" O.J.  
 9" x 7" x ½"  
 9½" x 6"  
 10" x 6"  
 10" x 6" x ½"  
 10" x 6" x ½" O.J.  
 10" x 6" x ½"  
 10" x 7" x ½"  
 12" x 6"  
 12" x 6" x ½"  
 A12" x 6" x ½" L.H.  
 12" x 6" x ½"  
 12" x 6½" x ½"  
 12" x 9" x ½"

Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## MOULDED GUTTERS

With Inside Joints except where marked O.J.

No. 42



SIZE

C4½	x 3
4½	x 3½
4½	x 3½
4½	x 3½
8½	x 4
9	x 4
9	x 5
12	x 7½

No. 42



SIZE

A7	x 6	x 7½
----	-----	------

No. 51



SIZE

6½	x 4½
6½	x 5

No. 42



SIZE

4	x 2½	x ½
A5	x 4½	x ½
A6	x 4½	x ½
7	x 4	x ½

No. 44



SIZE

4½	x 3½		B6	x 4½	L.H.
4½	x 3½	x ½	6	x 4½	x ½
A4½	x 3½	x ½	7	x 5	x ½
5	x 4		7	x 5	x ½
5½	x 3½	x ½	7	x 5	x ½
5½	x 3½	x ½	8	x 6	
5½	x 4		10	x 6	x ½
6	x 4½				

No. 53



SIZE

5' x 4'
6' x 5'
6' x 5' x 3/4"

No. 45



SIZE

4	x 3	x ½	6	x 4½	x ½
4½	x 3		6	x 4½	x ½
5	x 3	L.H.	6½	x 4½	x ½
5	x 3	x ½	7	x 4½	x ½
5	x 3		8	x 6	x ½
5	x 3½	x ½	8	x 6	x ½
6	x 4½				

No. 53



SIZE

A5	x 4
6	x 4

Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

Full-size sections on application

ION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW



## MOULDED GUTTERS

With Inside Joints except where marked O.J.

No. 78



SIZE

4" x 2½"  
4" x 2½" x ⅜"  
A4" x 3" x ⅜"  
4½" x 3"  
5" x 3" x ⅜"  
5" x 5" x ⅜"  
5½" x 4" x ⅜"  
6½" x 4" x ⅜"  
7" x 4" x ⅜"

No. 78



SIZE

A4½" x 3" x ⅜"  
A5" x 4" x ⅜"

No. 215



SIZE

A5" x 4" x ⅜"  
6" x 5" x ⅜"

No. 78



SIZE

B4½" x 3" x ½"  
B5" x 3" x ⅜"  
6" x 4" x ⅜"  
6" x 4" x ½"  
6" x 4½"

No. 103



SIZE

5½" x 4½" L.H.  
6½" x 5"

No. 239



SIZE

6½" x 5"

No. 248



SIZE

9½" x 4½"  
11" x 5" x ⅜" with  
drip on sole

No. 215



SIZE

5" x 3"  
5" x 3½"  
5" x 4" x ⅜"

No. 78



SIZE

4" x 3"  
5" x 4"

No. 252



SIZE

5½" x 3½"

Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## MOULDED GUTTERS

With Inside Joints except where marked O.J.

No. 270



SIZE

6" x 4" x  $\frac{1}{16}$ "

Also No. 270A

5" x 4" x  $\frac{1}{16}$ "

but with square corner

No. 278



SIZE

4 $\frac{1}{2}$ " x 3 $\frac{1}{2}$ " x  $\frac{1}{16}$ "

No. 271



SIZE

5" x 4" x  $\frac{1}{4}$ "

No. 280



SIZE

6" x 3 $\frac{1}{2}$ " x  $\frac{1}{16}$ "

No. 278



SIZE

5" x 4" x  $\frac{1}{16}$ "

6" x 4 $\frac{1}{2}$ " x  $\frac{1}{16}$ "

6" x 5" x  $\frac{1}{16}$ "

6 $\frac{1}{2}$ " x 5" x  $\frac{1}{16}$ "

No. 287



SIZE

6" x 4" x  $\frac{1}{16}$ "

Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

Full-size sections on application

IRON FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## ENRICHED GUTTERS

With Inside Joints except where marked O.J.



No. 116

6½" x 5"



No. 202

6" x 4"

7" x 5"

8" x 5"



No. 202

A5" x 4" x ⅜"

A6" x 4" x ⅜"

A8" x 5" x ⅜"



No. 246

6" x 4½"



No. 251

9" x 6"



No. 253

6" x 6"

Joints are at Right Hand (except where marked L.H.) looking at front of gutter

*Full-size sections on application*

**LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW**

## ENRICHED GUTTERS

With Inside Joints except where marked O.J.



No. 255  
6" x 5" x  $\frac{1}{8}$ "



No. 257  
6 $\frac{1}{2}$ " x 5" x  $\frac{1}{2}$ "



No. 261  
6" x 6" x  $\frac{1}{2}$ "



No. 264  
4" x 4 $\frac{1}{2}$ "



No. 265  
6" x 5" x  $\frac{1}{8}$ "



No. 266  
6" x 5" x  $\frac{1}{8}$ "

Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## ENRICHED GUTTERS

With Inside Joints except where marked O.J.



No. 268

6" x 4" x  $\frac{3}{8}$ "  
6" x 5" x  $\frac{1}{2}$ "  
7" x 5" x  $\frac{1}{2}$ "



No. 273

4" x 5" x  $\frac{3}{8}$ "  
5" x 4" x  $\frac{1}{2}$ "



No. 273

54" x 5" x  $\frac{1}{2}$ "



No. 274

4" x 3" x  $\frac{1}{4}$ "



No. 275

6 $\frac{1}{2}$ " x 5" x  $\frac{1}{2}$ "



No. 276

11 $\frac{1}{2}$ " x 9" x  $\frac{1}{2}$ "

Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## ENRICHED GUTTERS

With Inside Joints except where marked O.J.



No. 277  
5' x 4½" x ½"



No. 279  
4' x 3½" x ½"



No. 281  
5' x 4"



No. 282  
5' x 4½" x ½"



No. 284  
5' x 4½" x ½"



No. 285  
10' x 6" x ½"

Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

Full-size sections on application

ION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

# VALLEY AND BOX GUTTERS

With Outside Joints except where marked I.J.



No. 15  
Valley Gutter

SIZE	
12" x 5 $\frac{1}{2}$ "	x 6 $\frac{1}{2}$ " sole x $\frac{1}{4}$ "
14" x 7 $\frac{1}{2}$ "	x 8" sole x $\frac{1}{4}$ "
30" x 11 $\frac{1}{2}$ "	x 23 $\frac{1}{2}$ " sole x $\frac{1}{4}$ "

Roof Pitch
37°
32° & 27°
54°

No. 21  
Box Gutter



SIZE

4'	x 2"
4'	x 3"
4'	x 3" I.J.
4'	x 3" x $\frac{1}{8}$ "
4'	x 3" x $\frac{1}{8}$ " I.J.
4'	x 4"
4'	x 4" x $\frac{1}{8}$ "
4'	x 4" x $\frac{1}{8}$ "
4'	x 4" x $\frac{1}{8}$ "
4'	x 4" x $\frac{1}{8}$ "
4'	x 4" x $\frac{1}{8}$ " I.J.
4'	x 4" x $\frac{1}{8}$ "
4'	x 4" x $\frac{1}{8}$ " I.J.
4'	x 4" x $\frac{1}{8}$ "
4'	x 4" x $\frac{1}{8}$ "
AS	x 3"
AS	x 3" x $\frac{1}{8}$ "
AS	x 3" x $\frac{1}{8}$ "
5'	x 4"
5'	x 4" I.J.
5'	x 4" x $\frac{1}{8}$ "
5'	x 4" x $\frac{1}{8}$ "
5'	x 5"
5'	x 5" x $\frac{1}{8}$ "
6'	x 2"
6'	x 3"
6'	x 3" x $\frac{1}{8}$ "
6'	x 4"
6'	x 4" x $\frac{1}{8}$ "
6'	x 4" x $\frac{1}{8}$ "
6'	x 4" x $\frac{1}{8}$ "
6'	x 4" x $\frac{1}{8}$ "
6'	x 4" x $\frac{1}{8}$ "
6'	x 5"
6'	x 5" x $\frac{1}{8}$ "
6'	x 5" x $\frac{1}{8}$ "

6'	x 6"
6'	x 6" x $\frac{1}{8}$ "
6'	x 6" x $\frac{1}{8}$ "
6'	x 6" x $\frac{1}{8}$ " I.J.
B7'	x 4"
B7'	x 4" x $\frac{1}{8}$ "
7'	x 5"
7'	x 5" x $\frac{1}{8}$ "
7'	x 5" x $\frac{1}{8}$ "
7'	x 6"
7'	x 6" x $\frac{1}{8}$ "
7'	x 6" x $\frac{1}{8}$ "
7 $\frac{1}{2}$ '	x 3 $\frac{1}{2}$ " x $\frac{1}{8}$ " I.J.
8'	x 4" x $\frac{1}{8}$ "
8'	x 4" x $\frac{1}{8}$ "
8'	x 5" x $\frac{1}{8}$ "
8'	x 5" x $\frac{1}{8}$ "
8'	x 6" x $\frac{1}{8}$ "
8'	x 6" x $\frac{1}{8}$ "
8'	x 6" x $\frac{1}{8}$ "
9'	x 4" x $\frac{1}{8}$ "
9'	x 4" x $\frac{1}{8}$ "
9'	x 4" x $\frac{1}{8}$ "
9'	x 4" x $\frac{1}{8}$ "
9'	x 5" x $\frac{1}{8}$ "
9'	x 5" x $\frac{1}{8}$ "
9'	x 6" x $\frac{1}{8}$ "
9'	x 6" x $\frac{1}{8}$ "
9'	x 6" x $\frac{1}{8}$ " I.J.
9'	x 6" x $\frac{1}{8}$ "
B9'	x 6" x $\frac{1}{8}$ "
10'	x 4" x $\frac{1}{8}$ "
10'	x 4" x $\frac{1}{8}$ "
10'	x 4" x $\frac{1}{8}$ "
10'	x 5" x $\frac{1}{8}$ "
10'	x 5" x $\frac{1}{8}$ "

10'	x 6" x $\frac{1}{8}$ "
10'	x 6" x $\frac{1}{8}$ "
10'	x 7" x $\frac{1}{8}$ "
10'	x 7 $\frac{1}{2}$ " x $\frac{1}{8}$ " I.J.
10'	x 8" x $\frac{1}{8}$ "
11'	x 5" x $\frac{1}{8}$ " I.J.
11'	x 5" x $\frac{1}{8}$ "
11'	x 5" x $\frac{1}{8}$ "
11'	x 5" x $\frac{1}{8}$ "
11'	x 6" x $\frac{1}{8}$ "
11'	x 6" x $\frac{1}{8}$ "
11'	x 8" x $\frac{1}{8}$ "
12'	x 5" x $\frac{1}{8}$ "
12'	x 5" x $\frac{1}{8}$ "
12'	x 6" x $\frac{1}{8}$ "
12'	x 6" x $\frac{1}{8}$ "
A12'	x 6" x 10" sole x $\frac{1}{4}$ "
12'	x 7" x $\frac{1}{8}$ "
12'	x 8" x $\frac{1}{8}$ "
12'	x 9" x $\frac{1}{8}$ "
12'	x 10" x $\frac{1}{8}$ "
12 $\frac{1}{2}$ '	x 4" x $\frac{1}{8}$ "
13'	x 6" x $\frac{1}{8}$ "
13 $\frac{1}{2}$ '	x 8" x $\frac{1}{8}$ "
14'	x 6" x $\frac{1}{8}$ "
14'	x 6" x $\frac{1}{8}$ "
14'	x 7" x $\frac{1}{8}$ "
14'	x 7" x $\frac{1}{8}$ "
15'	x 6" x $\frac{1}{8}$ "
15'	x 6" x $\frac{1}{8}$ "
16'	x 6" x $\frac{1}{8}$ "
16'	x 7" x $\frac{1}{8}$ "
16 $\frac{1}{2}$ '	x 6" x $\frac{1}{8}$ "
18'	x 4 $\frac{1}{2}$ " x $\frac{1}{8}$ "
18'	x 9" x $\frac{1}{8}$ "
24'	x 6" x $\frac{1}{8}$ "

Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## BOX GUTTERS

With Outside Joints except where marked I.J.

No. 21



SIZE

A4" x 3" I.J.  
A6" x 5" x  $\frac{1}{2}$ " I.J.  
A7" x 4" I.J.

No. 21



SIZE

12" x 6" x  $\frac{3}{8}$ " I.J.  
12 $\frac{1}{2}$ " x 6" x  $\frac{3}{8}$ " I.J.  
12 $\frac{3}{4}$ " x 6" x  $\frac{3}{8}$ " I.J.

No. 21



SIZE

5" x 3 $\frac{1}{4}$ " x  $\frac{1}{16}$ " I.J.  
with 1" drip on sole  
A 9" x 6" x  $\frac{1}{4}$ "  
A10" x 6" x  $\frac{1}{8}$ " I.J.  
A10" x 6" x  $\frac{1}{2}$ " I.J.  
A12" x 6" x  $\frac{1}{4}$ "

No. 21  
Box Gutter



SIZE

5" x 3" x  $\frac{1}{16}$ " I.J.  
7" x 4" x  $\frac{1}{16}$ "

No. 21



SIZE

A10" x 7" x  $\frac{1}{8}$ "

No. 21



SIZE

A6" x 4" x  $\frac{1}{16}$ "  
A6" x 4 $\frac{1}{2}$ " x  $\frac{1}{16}$ " I.J.

No. 21



SIZE

5 $\frac{1}{2}$ " x 3" x  $\frac{1}{2}$ " I.J.

Joints are at Right Hand (except where marked L.H.) looking at front of Gutter

Full-size sections on application

ION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW



# BOUNDARY-WALL GUTTERS

With Outside Joints except where marked I.J.

No. 24



SIZE	Roof Pitch	SIZE	Roof Pitch	SIZE	Roof Pitch
6" x 4" x 3 1/2" sole x 1 1/2"		58" 13" x 5" x 6" sole x 1 1/2"		35" 17" x 6" x 6" sole x 1 1/2" I.J.	
6 1/2" x 5" x 2 1/2" sole x 1 1/2"		56" 13" x 5" x 7" sole x 1 1/2"		40" 17" x 6" x 6" sole x 1 1/2"	
7" x 3 1/2" x 3" sole		41" 13" x 5" x 9" sole x 1 1/2"		52" 17" x 6" x 10" sole x 1 1/2"	
7" x 4" x 4" sole		63" 13" x 5" x 9" sole x 1 1/2"		52" 17" x 7" x 9" sole x 1 1/2"	
7" x 5" x 3 1/2" sole x 1 1/2"		60" 13" x 6 1/2" x 5" sole x 1 1/2"		40" 17" x 5 1/2" x 5 1/2" sole x 1 1/2"	
8" x 4" x 6" sole x 1 1/2"		64" 13 1/2" x 9" x 7" sole x 1 1/2"		58" 18" x 5" x 10" sole x 1 1/2"	
8" x 4" x 6" sole x 1 1/2"		64" 13 1/2" x 6 1/2" x 6 1/2" sole x 1 1/2"		42" 18" x 6" x 7 1/2" sole x 1 1/2"	
8" x 5" x 5" sole x 1 1/2" I.J.		59" 14" x 4" x 6" sole x 1 1/2"	L.H.	26" 18" x 6" x 7 1/2" sole x 1 1/2"	
8 1/2" x 5" x 1 1/2" sole x 1 1/2"		59" 14" x 4 1/2" x 6" sole x 1 1/2"		28" 18" x 6" x 9" sole x 1 1/2"	
9" x 5 1/2" x 4 1/2" sole x 1 1/2"		38" 14" x 5" x 5" sole x 1 1/2"		26" 18" x 6" x 9" sole x 1 1/2"	
9" x 6" x 5" sole x 1 1/2"		54" A 14" x 5" x 5" sole x 1 1/2"		31" 18" x 6" x 10" sole x 1 1/2"	
9 1/2" x 3" x 3" sole x 1 1/2"		60" 14" x 5" x 6" sole x 1 1/2"		31" 18" x 6" x 10" sole x 1 1/2" L.H.	
9 1/2" x 3" x 3" sole x 1 1/2"		27" 14" x 5" x 6" sole x 1 1/2"		31" 18" x 6" x 12" sole x 1 1/2"	
9 1/2" x 5 1/2" x 4 1/2" sole x 1 1/2"		20" 14" x 5" x 6" sole x 1 1/2"		A 18" x 6" x 12" sole x 1 1/2"	
10" x 4" x 4 1/2" sole x 1 1/2"		48" 14" x 5" x 6 1/2" sole x 1 1/2"		35" 18" x 6" x 14" sole x 1 1/2"	
10" x 4" x 4 1/2" sole x 1 1/2"		35" 14" x 5" x 6 1/2" sole x 1 1/2"		35" 18" x 6" x 14" sole x 1 1/2"	
10" x 4" x 6" sole x 1 1/2"		35" 14" x 5" x 7" sole x 1 1/2"		36" 18" x 6 1/2" x 11" sole x 1 1/2"	
10" x 4 1/2" x 3 1/2" sole x 1 1/2"		45" 14" x 5" x 8" sole x 1 1/2"	L.H.	40" 18" x 9" x 12" sole x 1 1/2"	
10" x 4 1/2" x 3 1/2" sole x 1 1/2"		37" 14" x 6" x 8" sole x 1 1/2"		42" 18 1/2" x 7" x 6 1/2" sole x 1 1/2"	
10" x 5" x 4 1/2" sole x 1 1/2"		37" 14" x 6" x 8" sole x 1 1/2"		42" 19" x 5" x 10 1/2" sole x 1 1/2" L.H.	
10" x 5" x 6 1/2" sole x 1 1/2"		45" 14" x 6" x 8" sole x 1 1/2"		42" 19" x 6" x 9 1/2" sole x 1 1/2"	
10 1/2" x 6 1/2" x 7" sole x 1 1/2"		59" 14" x 8" x 5 1/2" sole x 1 1/2"		45" 19" x 7" x 11" sole x 1 1/2"	
11" x 5" x 6" sole x 1 1/2"		46" 14" x 8" x 8" sole x 1 1/2"		55" 19 1/2" x 6 1/2" x 12" sole x 1 1/2"	
11" x 4" x 6" sole x 1 1/2"		37" 14 1/2" x 6 1/2" x 9" sole x 1 1/2"	I.J.	51" 20" x 6" x 11" sole x 1 1/2"	
12" x 4" x 4 1/2" sole x 1 1/2"		29" 14 1/2" x 7" x 5 1/2" sole x 1 1/2"		38" 20" x 6" x 8 1/2" sole x 1 1/2"	
12" x 4 1/2" x 5" sole x 1 1/2"		34" 14 1/2" x 7" x 6 1/2" sole x 1 1/2"		34" 20" x 6 1/2" x 12" sole x 1 1/2"	
12" x 5" x 5" sole x 1 1/2"		36" 15" x 5" x 6" sole x 1 1/2"		30" 20 1/2" x 7" x 14" sole x 1 1/2"	
12" x 5" x 5" sole x 1 1/2"		36" 15" x 5" x 9" sole x 1 1/2"		41" 21" x 6" x 9 1/2" sole x 1 1/2"	
12" x 5" x 6" sole x 1 1/2"		40" 15" x 5" x 11" sole x 1 1/2"		53" 21" x 6" x 10" sole x 1 1/2"	
12" x 5" x 6" sole x 1 1/2"		40" 15" x 5" x 11" sole x 1 1/2"		53" 21" x 6" x 11 1/2" sole x 1 1/2"	
12" x 5" x 9 1/2" sole x 1 1/2"		65" 15" x 6" x 9" sole x 1 1/2"		47" 22" x 6" x 16" sole x 1 1/2"	
12" x 6" x 2 1/2" sole x 1 1/2"		35" 15 1/2" x 7" x 9" sole x 1 1/2"		50" 22" x 10 1/2" x 4 1/2" sole x 1 1/2"	
12" x 6" x 2 1/2" sole x 1 1/2"		35" 15 1/2" x 5 1/2" x 7 1/2" sole x 1 1/2"		38" 23" x 5" x 12" sole x 1 1/2"	
12" x 6 1/2" x 5" sole x 1 1/2"		40" 15 1/2" x 6 1/2" x 8" sole x 1 1/2"		40" 23" x 6" x 12" sole x 1 1/2"	
12" x 6 1/2" x 5" sole x 1 1/2"		40" 15 1/2" x 6" x 9" sole x 1 1/2"		45" 23 1/2" x 7" x 8 1/2" sole x 1 1/2"	
12" x 6 1/2" x 6" sole x 1 1/2"		45" 15 1/2" x 6" x 9" sole x 1 1/2"		45" 24" x 6" x 14 1/2" sole x 1 1/2"	
12" x 6 1/2" x 6" sole x 1 1/2"		45" 16" x 5" x 5 1/2" sole x 1 1/2"		25" 24" x 6" x 14 1/2" sole x 1 1/2"	
12" x 8" x 6" sole x 1 1/2" L.H.		56" 16" x 6" x 6" sole x 1 1/2"		32" 27" x 7" x 18" sole x 1 1/2"	
12" x 8" x 8" sole x 1 1/2"		68" 16" x 6" x 6" sole x 1 1/2"		32" 27" x 7" x 18" sole x 1 1/2" I.J.	
12 1/2" x 6 1/2" x 5 1/2" sole x 1 1/2"		42" 16" x 6 1/2" x 8" sole x 1 1/2"	I.J.	35" 28" x 8" x 16" sole x 1 1/2"	
		16" x 7" x 7 1/2" sole x 1 1/2"		42" 28" x 8" x 16" sole x 1 1/2"	
		16" x 7 1/2" x 7 1/2" sole x 1 1/2"		40" 28" x 8" x 16" sole x 1 1/2"	
		16 1/2" x 6" x 8" sole x 1 1/2"		34" 28" x 8" x 16" sole x 1 1/2"	
		16 1/2" x 7 1/2" x 7 1/2" sole x 1 1/2"		38" 28" x 8" x 16" sole x 1 1/2"	

Joints are at Right Hand (except where marked L.H.) looking at upright side of Gutter

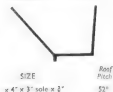
Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

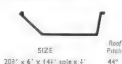
## BOUNDARY-WALL AND VALLEY GUTTERS

With Outside Joints except where marked I.J.

No. 24  
Boundary-Wall Gutter



No. 24  
Boundary-Wall Gutter



No. 24  
Boundary-Wall Gutter



No. 34. Trough  
Boundary-Wall Gutter



3" x 2"  
4" x 3" I.J.  
4" x 3" x 1/2" I.J.  
4 1/2" x 3" x 1/2" I.J.  
4 1/2" x 4" I.J.  
4 1/2" x 4" x 1/2" I.J.  
5" x 3" I.J.  
5" x 3" x 1/2"  
5" x 4" I.J.  
5" x 4 1/2" x 1/2"  
5 1/2" x 3 1/2" x 1/2" I.J.  
5 1/2" x 4 1/2" x 4" at front x 1/2" I.J.  
6" x 4" I.J.  
6" x 4 1/2" x 1/2" I.J.  
6" x 5" I.J.  
6 1/2" x 4 1/2" x 1/2" I.J.  
6 1/2" x 5" x 1/2" I.J.  
7" x 5" I.J.  
7" x 5"  
7" x 5" x 1/2" I.J.  
A7" x 5" x 1/2"  
8" x 7" x 1/2" I.J.

9" x 5" x 4 1/2" at front I.J.  
9" x 6" x 1/2" O.J., L.H.  
10 1/2" x 8" x 1/2" O.J., L.H.  
10 1/2" x 8" x 1/2" O.J., R.H.  
11" x 4 1/2" x 1/2" I.J., R.H.  
11" x 6" x 1/2" I.J., R.H.  
11 1/2" x 6" x 1/2" I.J., L.H.  
12" x 6" x 1/2" I.J., L.H.  
12" x 7" x 1/2" O.J., L.H.  
13 1/2" x 7" x 1/2" O.J., L.H.  
14" x 5" x 1/2" O.J., L.H.  
14 1/2" x 7" x 1/2" O.J., L.H.  
A16" x 7" x 1/2" I.J., R.H.  
16" x 7" x 1/2" I.J., L.H.  
18" x 6" x 1/2" O.J., R.H.  
18" x 9" x 1/2" O.J., L.H.  
21" x 8" x 14 1/2" sole x 1/2" O.J.  
I. R.H.

\*These Gutters have O.J., L.H. or R.H. looking at upright side except where marked I.J.

Joints are at Right Hand (except where marked L.H.) looking at front & upright side of Gutter

Full-size sections on application

ION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

# VALLEY GUTTERS

With Outside Joints except where marked I.J.

No. 31

Valley Gutter



SIZE	Roof Pitch	SIZE	Roof Pitch
9" x 5" x 6" sole x 1"	73°	19" x 4" x 5" sole x 1"	30°
10" x 4" x 2 1/2" sole x 1 1/2"	47°	19" x 5" x 5" sole x 1 1/2"	37°
12" x 3" x 5 1/2" sole x 1 1/2"	43°	19" x 5" x 5" sole x 1 1/2"	37°
12" x 3 1/2" x 3" sole x 1 1/2"	37°	19" x 5" x 7" sole x 1 1/2"	39°
12" x 3 1/2" x 3 1/2" sole x 1 1/2"	50°	19" x 5" x 7 1/2" sole x 1 1/2"	45°
12" x 5" x 3 1/2" sole x 1 1/2"	50°	19" x 5" x 9" sole x 1 1/2"	37°
12" x 5" x 5" sole x 1 1/2"	60°	19" x 5 1/2" x 4 1/2" sole x 1 1/2"	47°
12" x 6" x 5" sole x 1 1/2"	63°	19" x 5 1/2" x 8" sole x 1 1/2"	40°
12" x 6" x 6" sole x 1 1/2"	65°	19" x 6" x 5" sole x 1 1/2"	40°
12" x 8" x 4 1/2" sole x 1 1/2"	52°	19" x 6" x 5 1/2" sole x 1 1/2"	45°
12 1/2" x 4" x 6 1/2" sole x 1 1/2"	38°	19" x 6" x 7" sole x 1 1/2"	42°
13" x 4 1/2" x 2 1/2" sole x 1 1/2"	53°	19" x 6 1/2" x 7" sole x 1 1/2"	45°
13 1/2" x 4 1/2" x 6" sole x 1 1/2"	45°	20" x 6" x 6 1/2" sole x 1 1/2"	42°
14" x 4" x 6" sole x 1 1/2"	52°	20" x 6" x 8" sole x 1 1/2"	47°
14" x 5" x 6" sole x 1 1/2"	59°	20" x 6" x 9" sole x 1 1/2"	50°
14" x 5" x 8 1/2" sole x 1 1/2"	60°	20" x 6" x 10" sole x 1 1/2"	35°
14" x 6" x 7" sole x 1 1/2"	38°	20" x 7" x 16" sole x 1 1/2"	74°
14 1/2" x 3 1/2" x 6" sole x 1 1/2"	45°	20 1/2" x 5 1/2" x 6" sole x 1 1/2"	29°
15" x 4" x 6" sole x 1 1/2"	36°	20 1/2" x 4" x 3 1/2" sole x 1 1/2"	47°
15" x 4 1/2" x 6" sole x 1 1/2"	36°	21" x 6" x 9 1/2" sole x 1 1/2"	66°
15" x 5" x 2" sole x 1 1/2"	45°	21" x 6" x 16" sole x 1 1/2"	60°
15" x 5" x 2" sole x 1 1/2"	45°	21" x 7" x 13" sole x 1 1/2"	50°
15" x 5" x 5" sole x 1 1/2"	45°	21 1/2" x 8" x 9" sole x 1 1/2"	50°
15" x 5" x 5" sole x 1 1/2"	51°	21 1/2" x 4 1/2" x 12" sole x 1 1/2"	44°
15" x 5" x 7" sole x 1 1/2"	64°	22" x 4" x 3 1/2" sole x 1 1/2"	25°
15" x 5" x 10 1/2" sole x 1 1/2"	60°	22" x 5 1/2" x 8" sole x 1 1/2"	37°
15" x 6" x 8" sole x 1 1/2"	60°	22" x 6" x 12" sole x 1 1/2"	50°
15" x 6" x 8" sole x 1 1/2"	47°	22" x 6 1/2" x 9" sole x 1 1/2"	44°
16" x 6" x 5" sole x 1 1/2"	47°	22" x 7" x 8" sole x 1 1/2"	45°
16" x 6" x 5" sole x 1 1/2"	59°	22" x 7" x 10" sole x 1 1/2"	48°
16" x 6" x 8" sole x 1 1/2"	60°	22" x 7 1/2" x 12" sole x 1 1/2"	57°
16" x 7" x 8" sole x 1 1/2"	67°	22 1/2" x 5" x 14" sole x 1 1/2"	52°
17" x 4 1/2" x 8" sole x 1 1/2"	45°	23" x 5 1/2" x 6" sole x 1 1/2"	33°
17" x 5" x 10" sole x 1 1/2"	54°	24" x 5" x 7" sole x 1 1/2"	30°
17 1/2" x 4 1/2" x 6" sole x 1 1/2"	37°	24" x 5 1/2" x 5" sole x 1 1/2"	29°
17 1/2" x 6" x 3" sole x 1 1/2"	38°	24" x 6" x 6" sole x 1 1/2"	33°
18" x 4" x 6 1/2" sole x 1 1/2"	30°	24" x 6" x 8 1/2" sole x 1 1/2"	38°
18" x 5" x 9" sole x 1 1/2"	48°	A24" x 6" x 8 1/2" sole x 1 1/2"	36°
18" x 5" x 12" sole x 1 1/2"	59°	24" x 6" x 10" sole x 1 1/2"	40°
18" x 6" x 3 1/2" sole x 1 1/2"	40°	24" x 6" x 12" sole x 1 1/2"	45°
18" x 6" x 5" sole x 1 1/2"	42°	24" x 6" x 15" sole x 1 1/2"	53°
18" x 6" x 7" sole x 1 1/2"	47°	24" x 6" x 16" sole x 1 1/2"	55°
18" x 6" x 7 1/2" sole x 1 1/2"	50°	24" x 6 1/2" x 5" sole x 1 1/2"	37°
18" x 6" x 8" sole x 1 1/2"	50°	24" x 6 1/2" x 5" sole x 1 1/2"	33°
18" x 6" x 9" sole x 1 1/2"	53°	25" x 7" x 12" sole x 1 1/2"	48°
18" x 6" x 12" sole x 1 1/2"	63°	26" x 4 1/2" x 9" sole x 1 1/2"	30°
18" x 6 1/2" x 15 1/2" sole x 1 1/2"	80°	27 1/2" x 7" x 9 1/2" sole x 1 1/2"	38°
		29" x 7" x 6 1/2" sole x 1 1/2"	32°
		29 1/2" x 7" x 9 1/2" sole x 1 1/2"	33°
		30" x 6" x 18" sole x 1 1/2"	44°
		30" x 7" x 15" sole x 1 1/2"	41°
		30" x 8" x 12" sole x 1 1/2"	42°
		32 1/2" x 6" x 12" sole x 1 1/2"	28°

Full-size sections on application

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

# NORTH-LIGHT AND TROUGH VALLEY GUTTERS

With Outside Joints except where marked L.J.

## No. 35. North-Light Valley Gutter



SIZE	Roof Pitch
11" x 6" x 6" sole x 1"	65° & 70°
12" x 5" x 2" sole x 1"	35° & 60°
13" x 4" x 5" sole x 1"	39° & 65°
14" x 4" x 4" sole x 1"	30° & 60°
14" x 5" x 8" sole x 1"	52° & 65°
14" x 5" x 7" sole x 1"	45° & 71°
15" x 5" x 5" sole x 1"	37° & 59°
15" x 5" x 6" sole x 1"	37° & 63°
15" x 5" x 6" sole x 1"	37° & 63°
15" x 6" x 4" sole x 1"	44° & 59°
15" x 5" x 6" sole x 1"	37° & 63°
also L.H.	
15" x 5" x 9" sole x 1"	50° & 69°
15" x 5" x 9" sole x 1"	50° & 69°
15" x 6" x 4" sole x 1"	39° & 60°
15" x 5" x 6" sole x 1"	36° & 64°
16" x 6" x 7" sole x 1"	39° & 75°
L.H.	
16" x 6" x 9" sole x 1"	50° & 70°
17" x 6" x 5" sole x 1"	32° & 67°
17" x 7" x 9" sole x 1"	50° & 69°
18" x 5" x 6" sole x 1"	30° & 60°
18" x 6" x 5" sole x 1"	31° & 60°
18" x 6" x 5" sole x 1"	31° & 60°
18" x 6" x 6" sole x 1"	35° & 60°
18" x 6" x 6" sole x 1"	33° & 64°
18" x 6" x 6" sole x 1"	37° & 65°
L.H.	
18" x 6" x 8" sole x 1"	35° & 76°
18" x 7" x 8" sole x 1"	45° & 67°
18" x 6" x 6" sole x 1"	32° & 59°
18" x 6" x 9" sole x 1"	45° & 61°
19" x 6" x 6" sole x 1"	29° & 60°
L.J.	
19" x 6" x 7" sole x 1"	32° & 69°
19" x 6" x 7" sole x 1"	37° & 59°
19" x 7" x 13" sole x 1"	57° & 82°
20" x 5" x 8" sole x 1"	39° & 44°
20" x 6" x 13" sole x 1"	47° & 70°
20" x 6" x 5" sole x 1"	30° & 61°
20" x 6" x 7" sole x 1"	32° & 60°
20" x 5" x 6" sole x 1"	29° & 47°
L.H.	
21" x 5" x 10" sole x 1"	38° & 58°
21" x 5" x 10" sole x 1"	38° & 58°
21" x 6" x 9" sole x 1"	30° & 67°
21" x 6" x 7" sole x 1"	29° & 60°
L.H.	
21" x 6" x 7" sole x 1"	30° & 60°
21" x 6" x 7" sole x 1"	30° & 60°
21" x 6" x 10" sole x 1"	34° & 67°
21" x 6" x 12" sole x 1"	45° & 67°
21" x 5" x 7" sole x 1"	32° & 41°
21" x 6" x 8" sole x 1"	30° & 60°

22" x 6" x 8" sole x 1"	30° & 60°
22" x 6" x 10" sole x 1"	33° & 64°
22" x 6" x 12" sole x 1"	45° & 59°
22" x 7" x 6" sole x 1"	30° & 60°
23" x 6" x 8" sole x 1"	30° & 50°
24" x 6" x 10" sole x 1"	30° & 60°
also L.H.	
24" x 6" x 14" sole x 1"	42° & 64°
24" x 7" x 11" sole x 1"	32° & 68°
24" x 7" x 6" sole x 1"	30° & 60°
25" x 6" x 13" sole x 1"	46° & 68°
27" x 8" x 6" sole x 1"	26° & 65°
28" x 8" x 10" sole x 1"	29° & 62°
36" x 8" x 16" sole x 1"	27° & 65°
36" x 10" x 20" sole x 1"	30° & 73°

## No. 210 Trough Valley Gutter



SIZE	Roof Pitch
10" x 4" x 6" sole x 1"	47°
11" x 5" x 7" sole x 1"	23°
14" x 5" x 10" sole x 1"	58°
14" x 6" x 10" sole x 1"	47°
14" x 6" x 10" sole x 1"	47°
15" x 4" x 6" sole x 1"	30°
15" x 4" x 8" sole x 1"	27°
15" x 6" x 9" sole x 1"	22°
15" x 9" x 9" sole x 1"	60°
17" x 4" x 9" sole x 1"	32°
18" x 5" x 12" sole x 1"	29°
18" x 5" x 9" sole x 1"	18°
18" x 6" x 8" sole x 1"	28°
A 18" x 7" x 4" sole x 1"	30°
B 18" x 7" x 9" sole x 1"	46°
C 18" x 7" x 10" sole x 1"	45°
18" x 7" x 10" sole x 1"	25°
18" x 8" x 6" sole x 1"	39°
18" x 6" x 6" sole x 1"	26°
19" x 5" x 12" sole x 1"	45°
20" x 5" x 4" sole x 1"	22°
20" x 6" x 12" sole x 1"	47°
20" x 8" x 10" sole x 1"	50° & 33°
21" x 7" x 9" sole x 1"	48°
22" x 6" x 16" sole x 1"	30°
22" x 7" x 14" sole x 1"	30°
22" x 6" x 13" sole x 1"	23°
23" x 5" x 7" sole x 1"	30°
24" x 6" x 8" sole x 1"	25°
24" x 6" x 10" sole x 1"	30°
A 24" x 6" x 10" sole x 1"	33°
24" x 7" x 12" sole x 1"	26°
24" x 8" x 15" sole x 1"	27°
25" x 6" x 10" sole x 1"	27°
25" x 7" x 9" sole x 1"	37°
26" x 7" x 15" sole x 1"	20°
27" x 6" x 9" sole x 1"	27°
27" x 6" x 14" sole x 1"	24°
32" x 8" x 11" sole x 1"	20°
36" x 8" x 9" sole x 1"	28°
36" x 9" x 9" sole x 1"	28°

Joints are at Right Hand (except where marked L.H.) looking at steep side of Gutters

Full-size sections on application

ION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## PAVEMENT GUTTERS

No. 1. With Perforated Cover, Loose or Fixed



SECTION



$4' \times 2\frac{1}{2}' \times \frac{1}{8}"$  Thick. Cover  $\frac{1}{2}"$  Thick  
and  $6' \times 3' \times \frac{1}{8}"$  Thick. Cover  $1"$  Thick (maximum)

No. 2. With Solid Cover, Loose or Fixed



$5' \times 4' \times \frac{1}{2}"$  Thick. Cover  $\frac{1}{8}"$  Thick

No. 3. Cast with Solid Top



$3' \times 3' \times \frac{1}{2}"$  Thick and  $4\frac{1}{2}' \times 3\frac{1}{2}' \times \frac{1}{2}"$  Thick  
Top  $\frac{1}{8}"$  over Roughening

No. 4. With Solid Cover, Loose or Fixed



$6\frac{1}{2}' \times 2\frac{1}{2}' \times \frac{1}{2}"$  Thick. Cover  $\frac{1}{8}"$  Thick

No. 5. With Solid Cover, Loose or Fixed



$7' \times 2\frac{1}{2}' \times \frac{1}{2}"$  Thick. Cover  $\frac{1}{2}"$  Thick over Chequer

No. 6. With Heavy Perforated Cover, Loose or Fixed



$6' \times 3' \times \frac{1}{8}"$  Thick. Cover  $1"$  Thick

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

# VENTILATING GRATINGS AND PANELS

No. 8



9" x 4½" x ½" Thick  
9" x 6" x ½" Thick  
10" x 10" x ½" Thick

No. 9



8" x 6" x ½" Thick  
9" x 4" x ½" Thick  
10" x 6½" x ½" Thick  
12" x 4" x ½" Thick  
12" x 9" x ½" Thick

No. 15



6" x 6" x ½" Thick  
9" x 3" x ½" Thick  
9" x 4" x ½" Thick  
9" x 6" x ½" Thick  
10" x 8" x ½" Thick  
11" x 11" x ½" Thick  
12" x 3" x ½" Thick  
12" x 6" x ½" Thick  
12" x 8" x ½" Thick  
14" x 7" x ½" Thick  
16" x 12" x ½" Thick  
18" x 18" x ½" Thick

No. 35



5½" x 5½" x ½" Thick  
6" x 5" x ½" Thick

No. 33



7" x 7" x ½" Thick  
8" x 8" x ½" Thick  
10" x 6" x ½" Thick  
12" x 8" x ½" Thick  
12" x 9" x ½" Thick  
12" x 12" x ½" Thick  
13" x 7" x ½" Thick  
13" x 7" x ½" Thick  
14" x 8" x ½" Thick  
21" x 12" x ½" Thick  
23" x 16" x ½" Thick

No. 36



6" x 4" x ½" Thick  
6" x 6" x ½" Thick  
9" x 3" x ½" Thick  
9" x 4" x ½" Thick  
9" x 6" x ½" Thick  
9" x 9" x ½" Thick  
12" x 6" x ½" Thick  
15½" x 5½" x ½" Thick

No. 46



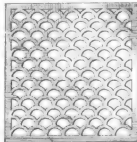
6" x 6" x ½" Thick  
9" x 6" x ½" Thick  
9" x 6" x ½" Thick  
9" x 9" x ½" Thick  
12" x 6" x ½" Thick  
12" x 7" x ½" Thick  
12" x 9" x ½" Thick  
12" x 9" x ½" Thick  
12" x 12" x ½" Thick  
14" x 7" x ½" Thick  
14" x 10" x ½" Thick  
14" x 14" x ½" Thick  
15" x 7" x ½" Thick  
15" x 12" x ½" Thick  
17" x 15" x ½" Thick  
18" x 12" x ½" Thick  
24" x 12" x ½" Thick  
36" x 15" x ½" Thick

No. 45



5" x 5" x ½" Thick  
6" x 6" x ½" Thick  
9" x 3½" x ½" Thick  
9" x 6" x ½" Thick  
2" x 2½" x ½" Thick  
2" x 6" x ½" Thick  
3½" x 8½" x ½" Thick  
6" x 3½" x ½" Thick  
6" x 6" x ½" Thick  
6" x 7" x ½" Thick

No. 47



23½" x 25" x ½" Thick

No. 76



Diam. Thick  
3" x ½" Thick  
3½" x ½" Thick  
4" x ½" Thick  
5" x ½" Thick  
6" x ½" Thick  
6½" x ½" Thick  
7" x ½" Thick  
7½" x ½" Thick  
8" x ½" Thick  
9" x ½" Thick

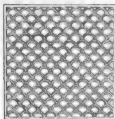
No. 84



15" x 7" x ½" Thick  
15" x 9" x ½" Thick  
16" x 11" x ½" Thick  
19" x 31" x ½" Thick  
21" x 17" x ½" Thick

# VENTILATING GRATINGS AND PANELS

No. 85



20 $\frac{1}{2}$ " x 20 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick

No. 95



9" x 9" x  $\frac{1}{2}$ " Thick

No. 96



6" x 4"	9" x 4 $\frac{1}{2}$ "	12" x 6"
6" x 6"	9" x 6"	12" x 8"
7" x 7"	9" x 8"	12" x 9"
8" x 6"	10" x 4"	12" x 10"
8" x 7"	10" x 6"	12" x 12"
8" x 8"	10" x 8"	14" x 10"
9" x 3"	10" x 10"	18" x 6"
9" x 3 $\frac{1}{2}$ "	12" x 4"	18" x 12"
9" x 4"		18" x 18"

All  $\frac{1}{8}$ " Thick

No. 147



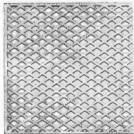
34" x 12 $\frac{1}{2}$ " x  $\frac{1}{8}$ " Thick

No. 141



9" x 9"      12" x 12"  
12" x 8 $\frac{1}{2}$ "      22" x 12"  
All  $\frac{1}{2}$ " Thick

No. 248



23 $\frac{1}{2}$ " x 23 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick

No. 622



6" x 3"	9" x 9"	12" x 9"
6" x 4"	10" x 4"	12" x 12"
6" x 6"	10" x 6"	14" x 10"
8" x 6"	10" x 10"	18" x 6"
9" x 4"	12" x 3"	18" x 12"
9" x 6"	12" x 4"	18" x 18"
9" x 8"	12" x 8"	

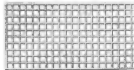
All  $\frac{1}{8}$ " Thick

No. 652



12" x 7" x  $\frac{1}{2}$ " Thick

No. 651



17 $\frac{1}{2}$ " x 11 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick  
27" x 12 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick  
24" x 12" x  $\frac{1}{2}$ " Thick

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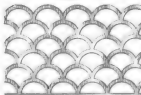
## VENTILATING GRATINGS AND PANELS

No. 677



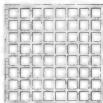
12" x 12" x  $\frac{1}{4}$ " Thick

No. 718



Up to 44 $\frac{1}{2}$ " x 30 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick

No. 724



24" x 24" x  $\frac{1}{4}$ " Thick

No. 726

Double Grating for Mosquito Gauze



23 $\frac{1}{2}$ " x 13" x  $\frac{1}{4}$ " Thick

Inner Grating Detachable for Removal of Gauze

No. 819



6" x 6" x  $\frac{1}{2}$ " Thick

9" x 9" x  $\frac{1}{4}$ " Thick

No. 844



26 $\frac{1}{2}$ " x 8" x  $\frac{1}{4}$ " Thick

No. 787



Up to 62" x 23 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick

No. 795



48 $\frac{1}{2}$ " x 13" x  $\frac{1}{2}$ " Thick

No. 810



4 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick

No. 867



8 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick



# VENTILATING GRATINGS WITH MOVABLE BACK PLATES

No. 12



6" and 12" Diam.  
 $\frac{3}{4}$ " Thick

No. 16



9" x 6" x  $\frac{1}{2}$ " Thick  
12" x 8" x  $\frac{1}{2}$ " Thick  
13 $\frac{1}{2}$ " x 10" x  $\frac{1}{2}$ " Thick  
14" x 9" x  $\frac{1}{2}$ " Thick  
15 $\frac{1}{2}$ " x 6 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick  
18" x 7 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick  
18" x 10" x  $\frac{1}{2}$ " Thick  
24" x 10" x  $\frac{1}{2}$ " Thick

No. 70



9" x 5" x  $\frac{1}{2}$ " Thick  
9" x 6" x  $\frac{1}{2}$ " Thick  
12" x 6" x  $\frac{1}{2}$ " Thick  
14" x 6" x  $\frac{1}{2}$ " Thick

No. 72



5" x 5" x  $\frac{1}{2}$ " Thick  
6" x 6" x  $\frac{1}{2}$ " Thick  
7" x 7" x  $\frac{1}{2}$ " Thick  
9" x 9" x  $\frac{1}{2}$ " Thick  
11" x 11" x  $\frac{1}{2}$ " Thick

No. 94



9" Diam. x  $\frac{1}{2}$ " Thick  
22" Diam. x  $\frac{1}{2}$ " Thick

No. 803

Movable Back Plate



17" Diam.  
Fixed Plate  $\frac{3}{4}$ " Thick  
Movable Plate  $\frac{1}{2}$ " Thick

No. 143



10" x 4" x  $\frac{1}{2}$ " Thick

No. 585



11 $\frac{1}{2}$ " x 7 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick

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## AIR BRICKS

No. 2



$4\frac{1}{2}'' \times 3'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $9'' \times 3'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $9'' \times 3\frac{1}{2}'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $9'' \times 4'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $9'' \times 5'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $9'' \times 6\frac{1}{2}'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $12'' \times 6'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $12'' \times 6\frac{1}{2}'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $13\frac{1}{2}'' \times 9'' \times 3'' \times \frac{1}{2}''$  Thick  
 $14'' \times 3\frac{1}{2}'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick

No. 3



$6'' \times 6'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $9'' \times 3'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $9'' \times 4\frac{1}{2}'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $9'' \times 6'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $9'' \times 6\frac{1}{2}'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $9'' \times 9'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $12'' \times 6\frac{1}{2}'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $12'' \times 12'' \times 2'' \times \frac{1}{2}''$  Thick  
 $16'' \times 9'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick

No. 4  
Movable Back Plate



$6'' \times 3'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $9'' \times 3'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $9'' \times 4'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $9'' \times 6'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $9'' \times 9'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $12'' \times 6'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $12'' \times 8'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $12'' \times 9'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $12'' \times 12'' \times 3'' \times \frac{1}{2}''$  Thick  
 $14'' \times 10\frac{1}{2}'' \times 3'' \times \frac{1}{2}''$  Thick  
 $24'' \times 9'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick

No. 22



$9'' \times 3'' \times 2\frac{1}{2}''$   
 $9'' \times 9'' \times 2\frac{1}{2}''$   
 $12'' \times 6'' \times 2\frac{1}{2}''$   
 $12'' \times 9'' \times 2\frac{1}{2}''$   
 $12'' \times 12'' \times 2\frac{1}{2}''$   
 All  $\frac{1}{2}''$  Thick

No. 23



$10'' \times 8'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick

No. 30



$3'' \times 3'' \times 3'' \times \frac{1}{2}''$  Thick  
 $9'' \times 3'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick

No. 71

Front can be taken out



$9'' \times 6'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $12'' \times 6'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick

No. 55



$9'' \times 6'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $9'' \times 6\frac{1}{2}'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $12'' \times 6'' \times 3'' \times \frac{1}{2}''$  Thick  
 $14'' \times 3\frac{1}{2}'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $14'' \times 7'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $14'' \times 7\frac{1}{2}'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $14'' \times 9'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $14\frac{1}{2}'' \times 5\frac{1}{2}'' \times 3'' \times \frac{1}{2}''$  Thick

No. 34



$12'' \times 9'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick  
 $12'' \times 12'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick

No. 97  
Movable Back Plate



$10\frac{1}{2}'' \times 9'' \times 2\frac{1}{2}'' \times \frac{1}{2}''$  Thick

ION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## AIR BRICKS

No. 98



9" x 9" x 2 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick  
12" x 10 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick  
18" x 10 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick

No. 99



12" x 12" x 2 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick

No. 123



9" x 3" x 2 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick  
9" x 9" x 2 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick  
12" x 12" x 2 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick  
12" x 12" x 2 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick

No. 123



6" x 6" x 1 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick  
9" x 3" x 1" x  $\frac{1}{2}$ " Thick  
9" x 6" x 1" x  $\frac{1}{2}$ " Thick  
12" x 6" x 1" x  $\frac{1}{2}$ " Thick  
12" x 12" x 1" x  $\frac{1}{2}$ " Thick  
14" x 6 $\frac{1}{2}$ " x 1" x  $\frac{1}{2}$ " Thick  
14" x 9" x 1" x  $\frac{1}{2}$ " Thick  
14" x 10" x 1" x  $\frac{1}{2}$ " Thick  
24" x 12" x 1" x  $\frac{1}{2}$ " Thick

No. 138

Movable Back Plate



9" x 3" x 2 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick

No. 589



9" x 5 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick  
9" x 6" x 2 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick  
12" x 6" x 2 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick  
12" x 8 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick  
and 12" x 9" x 2 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick  
All  $\frac{1}{2}$ " Thick

No. 618



9" x 6" x 3" x  $\frac{1}{2}$ " Thick

No. 590



12" x 9" x 3" x  $\frac{1}{2}$ " Thick  
16" x 9" x 3" x  $\frac{1}{2}$ " Thick

No. 626

Hinged Grating



14" x 9" x 2" x  $\frac{1}{2}$ " Thick

No. 628

Front can be taken out



9" x 3" x 2 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick  
9" x 9" x 2 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick  
12" x 12" x 2 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick  
14" x 14" x 2 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick  
18" x 6" x 2 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick  
and 18" x 18" x 2 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick  
All  $\frac{1}{2}$ " Thick

No. 625

Front can be taken out



12" x 12" x 2 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick  
14" x 6 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Thick

No. 627

Hinged Grating



9" x 9" x 2" x  $\frac{1}{2}$ " Thick

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## AIR BRICKS

No. 629



11" x 9" x 1½" x ¾" Thick

No. 641



9" x 6" x 1½" x ¾" Thick  
9" x 9" x 2" x ¾" Thick  
12" x 12" x 2" x ¾" Thick

No. 656  
Hinged Grating



9" x 9" x 2" 14" x 9" x 2"  
¾" Thick

No. 658



9" x 3" x 2½" x ½" Thick  
9" x 6" x 2½" x ½" Thick  
9" x 9" x 2½" x ½" Thick  
10" x 10" x 2½" x ½" Thick  
13" x 9" x 2½" x ½" Thick  
14" x 9" x 2½" x ½" Thick  
14" x 13" x 2½" x ½" Thick  
18" x 9" x 2½" x ½" Thick  
18" x 13" x 2½" x ½" Thick

No. 669

Hinged Grating



9" x 9" x 4½" 12" x 6" x 4½"  
and 14" x 6" x 4½"  
All ½" Thick

No. 686

Front can be taken out



12" x 9" x 4½" 14" x 9" x 4½"  
and 18" x 9" x 4½"  
All ½" Thick

No. 699



12" x 6½" x 2" x ½" Thick  
16" x 7½" x 2" x ½" Thick

No. 709



5" Diam. x 2½" x ¾" Thick

ION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## LOUVRE VENTILATORS

No. 65  
Fixed Louvres



9½"	x	9½"	x	1½"	x	1½"	Thick
11"	x	4"	x	1½"	x	1½"	Thick
14"	x	7"	x	1½"	x	1½"	Thick
14"	x	13"	x	1½"	x	1½"	Thick
17"	x	18"	x	1½"	x	1½"	Thick

No. 681  
Fixed Louvres



11" x 16" x 1½" x 1½" Thick  
Front can be taken out

No. 698  
Fixed Louvres



5½" x 5½" x 1"

No. 703  
Fixed Louvres  
(Vermin Proof)



9"	x	3"	x	2½"
9"	x	4½"	x	2½"
9"	x	6"	x	2½"
9"	x	9"	x	2½"
12"	x	6"	x	2½"
12"	x	9"	x	2½"
12"	x	12"	x	2½"

Also No. 891  
6" x 6" x 1½"

No. 817  
Fixed Louvres



47" x 12" x 3"

No. 817  
Fixed Louvres



9"	x	3"	x	2"
9"	x	6"	x	2"
9"	x	9"	x	2"

No. 809  
Fixed Louvres



13", 19½" and 25½" Diam. x 1½"

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## CONTINUOUS GRATINGS

No. 35



3' x 4' 2½" Long x ½" Thick. ½" Mesh  
3' x 3' 0" Long. (Border All Round)

No. 129



3' x 3' 2½" Long x ½" Thick. ½" Mesh

No. 107



4' x 2' 9" Long x ½" Thick

No. 688



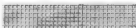
4' x 3' 6" Long x ½" Thick. ½" Mesh

No. 35



6' x 1' 8" Long x ½" Thick. ½" Mesh  
6' x 2' 6½" Long x ½" Thick. ½" Mesh  
6' x 4' 2" Long x ½" Thick. ½" Mesh

No. 46



5' x 3' 11½" Long x ½" Thick. ½" Mesh  
6' x 1' 10" Long x ½" Thick. ½" Mesh  
6' x 2' 5½" Long x ½" Thick. ½" Mesh  
6' x 4' 0" Long x ½" Thick. ½" Mesh

No. 117



6' x 4' 0" Long x ½" Thick

No. 639



6' x 4' 0" Long x ½" Thick. ½" Mesh  
6½' x 2' 0" Long x ½" Thick

No. 101



6' x 4' 5½" Long x ½" Thick. ½" Mesh

No. 48



6½' x 4' 2½" Long x ½" Thick. ½" Mesh  
Border All Round

## CONTINUOUS GRATINGS

No. 720



6' x 3' 11½" Long x 1" Thick. ½" Mesh

No. 749



6' x 2' 0" Long x ½" Thick. ½" Mesh

No. 46



7' x 3' 11½" Long x ½" Thick. ½" Mesh

No. 798



7½' x 3' 0½" Long x ½" Thick. ½" Slots

No. 35



8' x 3' 0½" Long x ½" Thick. ½" Mesh

8½' x 2' 11½" Long x ½" Thick. ½" Mesh

9' x 4' 2½" Long x ½" Thick. ½" Mesh

No. 587



8' x 2' 11½" Long x ½" Thick. 1" Mesh

9' x 4' 0" Long x ½" Thick. 1" Mesh

No. 596



8½' x 4' 0" Long x ½" Thick. ½" Mesh  
1" Thick on Edges

No. 710



8½' x 3' 11½" Long x 1" Thick. ½" Mesh

No. 868



9' x 3' 0" Long x 1" Thick. ½" Mesh

No. 48



8½' x 4' 2½" Long x ½" Thick. 1½" Mesh  
(Border All Round)

**LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW**

## CONTINUOUS GRATINGS

No. 116



9" x 4' 2 $\frac{1}{2}$ " Long x  $\frac{1}{8}$ " Thick. 1 $\frac{1}{2}$ " Mesh

No. 651



10" x 2' 2 $\frac{1}{2}$ " Long x  $\frac{1}{8}$ " Thick.  $\frac{3}{4}$ " Mesh  
 11 $\frac{1}{2}$ " x 1' 5 $\frac{1}{2}$ " Long x  $\frac{1}{8}$ " Thick.  $\frac{3}{4}$ " Mesh  
 11 $\frac{1}{2}$ " x 1' 11 $\frac{1}{2}$ " Long x  $\frac{1}{8}$ " Thick.  $\frac{3}{4}$ " Mesh  
 1' 0" x 2' 0" Long x  $\frac{1}{8}$ " Thick.  $\frac{3}{4}$ " Mesh  
 1' 0 $\frac{1}{2}$ " x 1' 8 $\frac{1}{2}$ " Long x  $\frac{1}{8}$ " Thick.  $\frac{3}{4}$ " Mesh  
 (Border All Round)

No. 869



10" x 4' 2 $\frac{1}{2}$ " Long x  $\frac{1}{8}$ " Thick.  $\frac{3}{4}$ " Mesh

No. 645



1' 0" x 3' 6" Long x  $\frac{1}{8}$ " Thick. 1 $\frac{1}{2}$ " Mesh

No. 117



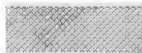
9" x 4' 0" Long x  $\frac{1}{8}$ " Thick

No. 249



10 $\frac{1}{2}$ " x 4' 2 $\frac{1}{2}$ " Long x  $\frac{1}{8}$ " Thick. 1 $\frac{1}{2}$ " Mesh

No. 35



11 $\frac{1}{2}$ " x 4' 2 $\frac{1}{2}$ " Long x  $\frac{1}{8}$ " Thick.  $\frac{3}{4}$ " Mesh  
 1' 0" x 4' 2 $\frac{1}{2}$ " Long x  $\frac{1}{8}$ " Thick.  $\frac{3}{4}$ " Mesh

No. 907

For reinforcing the surface of Concrete Floors



1' 0" x 1' 0" Long x  $\frac{3}{8}$ " Thick. 1" Mesh  
 (with Border on Two Sides only)  
 1' 0 $\frac{1}{2}$ " x 1' 0 $\frac{1}{2}$ " Long x  $\frac{3}{8}$ " Thick. 1" Mesh  
 (with Border on All Four Sides)

No. 48



1' 0" x 4' 2 $\frac{1}{2}$ " Long x  $\frac{3}{8}$ " Thick. 1 $\frac{1}{2}$ " Mesh



## CONTINUOUS GRATINGS

No. 799



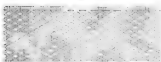
1' 0" x 3' 3" Long. 2" Mesh  
1 1/4" Thick at Edge, 1 1/2" Thick at Centre

No. 739



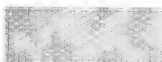
1' 0" x 4' 2" Long x 1 1/2" Thick. 1" Mesh

No. 868



1' 1 1/4" x 4' 0 1/2" Long x 1" Thick. 1 1/2" Mesh

No. 869



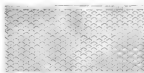
1' 1" x 4' 2 1/2" Long x 1 1/2" Thick. 1 1/2" Mesh

No. 741



1' 2" x 5' 4 1/2" Long x 1 1/2" Thick. 1" Sloes

No. 833



1' 2 1/2" x 3' 1 1/2" Long x 1 1/2" Thick. 1 1/2" Mesh

No. 645



1' 2 1/2" x 4' 3" Long x 1 1/2" Thick. 1 1/2" Mesh  
1' 3 1/2" x 3' 6 1/2" Long x 1 1/2" Thick. 1 1/2" Mesh

No. 911



1' 2 1/2" x 3' 0" Long x 1 1/2" Thick. 1 1/2" Mesh

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## CONTINUOUS GRATINGS

No. 48



1' 3" x 4' 3" Long x  $\frac{1}{2}$ " Thick.  $1\frac{1}{2}$ " Mesh

No. 864



1' 3" x 2' 0" Long x 2" Thick. 1" Slots

No. 35



1' 3" x 4' 2 $\frac{1}{2}$ " Long x  $\frac{1}{2}$ " Thick.  $\frac{3}{4}$ " Mesh

No. 741



1' 3 $\frac{1}{2}$ " x 2' 6" Long x 1" Thick.  $\frac{3}{4}$ " Slots

No. 35



1' 4 $\frac{1}{2}$ " x 3' 10 $\frac{1}{2}$ " Long x  $\frac{1}{2}$ " Thick.  $\frac{3}{4}$ " Mesh

No. 68



1' 5" x 2' 4" Long x 1" Thick.  $1\frac{1}{2}$ " Mesh

No. 739



1' 5 $\frac{1}{2}$ " x 4' 1 $\frac{1}{2}$ " Long x  $\frac{3}{4}$ " Thick. 1" Mesh

No. 864



1' 6" x 3' 1 $\frac{1}{2}$ " Long x 2" Thick. 1" Slots

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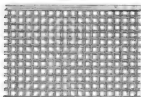
## CONTINUOUS GRATINGS

No. 35



1' 6" x 4' 2½" Long x ½" Thick. 2" Mesh

No. 149



1' 11½" x 2' 10½" Long x ½" Thick. 1" Mesh

No. 913



1' 11½" x 1' 11½" Square x ½" Thick. 2" Mesh

No. 912



1' 11½" x 2' 11½" Long x 2" Thick. 1½" Slots

No. 35



1' 11½" x 4' 3" Long x ½" Thick. 2" Mesh

No. 741



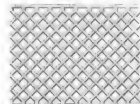
1' 9½" x 2' 6" Long x 1" Thick. 2" Slots

No. 249



1' 10" x 3' 9½" Long x ¼" Thick. ½" Mesh

No. 144

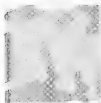


2' 0" x 3' 1½" Long x ½" Thick. 1½" Mesh

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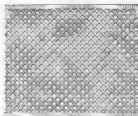
## CONTINUOUS GRATINGS

No. 755



2' 0" x 2' 0" Square x  $\frac{3}{8}$ " Thick.  $\frac{1}{2}$ " Mesh

No. 738



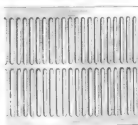
2' 3" x 3' 0" Long x  $\frac{3}{8}$ " Thick. 1" Mesh

No. 755



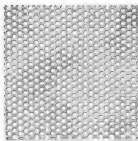
Up to 2' 11 $\frac{1}{2}$ " x 3' 10 $\frac{1}{2}$ " Long x  $\frac{3}{8}$ " Thick  
 $\frac{3}{4}$ " Mesh

No. 741



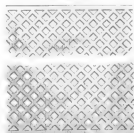
2' 4" x 2' 6" Long x 1" Thick.  $\frac{1}{2}$ " Slots

No. 749



3' 0" x 3' 0" Long x  $\frac{3}{8}$ " Thick.  $\frac{1}{2}$ " Mesh

No. 68

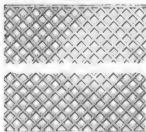


2' 11 $\frac{1}{2}$ " x 3' 1 $\frac{1}{2}$ " Long x 1" Thick.  $\frac{1}{2}$ " Mesh  
T Section of Bar

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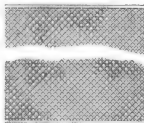
## CONTINUOUS GRATINGS

No. 144



3' 0" x 2' 10" Long x  $\frac{1}{4}$ " Thick.  $1\frac{1}{2}$ " Mesh

No. 35



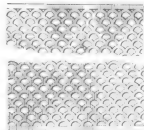
2' 11 $\frac{1}{2}$ " x 3' 0 $\frac{1}{2}$ " Long x  $\frac{1}{4}$ " Thick.  $2\frac{1}{2}$ " Mesh

No. 596



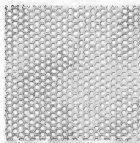
Up to 3' 11" x 2' 4" Long x  $\frac{1}{4}$ " Thick.  $2\frac{1}{2}$ " Mesh

No. 47



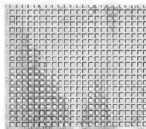
3' 6" x 3' 6" Long x  $\frac{1}{4}$ " Thick

No. 831



Up to 4' 0" x 3' 0" Long x  $\frac{1}{4}$ " Thick.  $2\frac{1}{2}$ " Mesh

No. 164

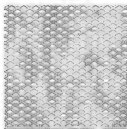


Up to 3' 4" x 3' 4" Long x  $\frac{1}{4}$ " Thick.  $2\frac{1}{2}$ " Mesh

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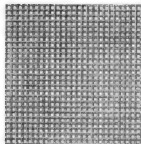
## CONTINUOUS GRATINGS

No. 868



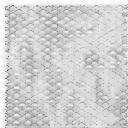
Up to 4' 3" x 4' 11"  
1" Thick,  $\frac{5}{8}$ " Mesh

No. 649



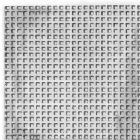
Up to 4' 4" x 3' 2"  
 $\frac{5}{16}$ " Thick,  $\frac{1}{2}$ " Mesh

No. 869



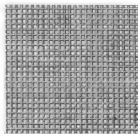
Up to 4' 4 $\frac{1}{2}$ " x 4' 2"  
 $\frac{1}{2}$ " Thick,  $\frac{3}{4}$ " Mesh

No. 672



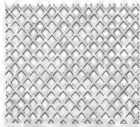
Up to 4' 3" x 3' 3"  
 $\frac{1}{8}$ " Thick,  $\frac{1}{4}$ " Mesh

No. 659



Up to 4' 4" x 3' 2"  
 $\frac{3}{8}$ " Thick,  $\frac{11}{16}$ " Mesh

No. 714

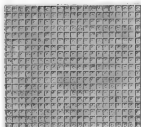


Up to 4' 6 $\frac{1}{2}$ " x 4' 0"  
 $\frac{1}{4}$ " Thick,  $\frac{1}{2}$ " Mesh

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

# CONTINUOUS GRATINGS AND PLATES

No. 162



Up to 4' 10" x 3' 7" Long x  $\frac{1}{16}$ " Thick

No. 684

Solid



Up to 3' 0" x 1' 6"

Up to 3' 0" x 1' 9"

$\frac{1}{8}$ " Thick min.,  $\frac{3}{8}$ " max. x  $\frac{1}{2}$ " Chequer

Up to 4' 0" x 2' 0"

$\frac{1}{8}$ " Thick min.,  $\frac{1}{2}$ " Thick max. x  $\frac{1}{2}$ " Chequer

3' 3 $\frac{3}{4}$ " x 1' 0" x  $\frac{1}{8}$ " Chequer x  $\frac{1}{2}$ " Thick

2' 0 $\frac{1}{2}$ " x 1' 0" x  $\frac{1}{8}$ " Chequer x  $\frac{1}{2}$ " Thick

No. 105

Solid



Up to 3' 0" x 2' 0" x 2 $\frac{1}{2}$ " Chequer. Also 3' 0" x 1' 1'  $\frac{1}{2}$ " Thick min.,  $\frac{1}{2}$ " Thick max.

Up to 11' x 4' 5 $\frac{1}{2}$ " x 1 $\frac{1}{2}$ " Chequer. Also 8' x 4' x 0'  $\frac{1}{2}$ " Thick min.,  $\frac{1}{2}$ " Thick max.

Up to 2' 11" x 2' 10" x  $\frac{1}{16}$ " Chequer  
 $\frac{1}{2}$ " Thick min.,  $\frac{1}{2}$ " Thick max.

Also 2' 11" x 1' 2" x  $\frac{1}{16}$ " Chequer

2' 11" x 10" x  $\frac{1}{16}$ " Chequer

2' 11" x 4' x  $\frac{1}{16}$ " Chequer

2' 5 $\frac{1}{2}$ " x 6' x  $\frac{1}{16}$ " Chequer

2' 6" x 6' x  $\frac{1}{16}$ " Chequer

3' 0" x 10 $\frac{1}{2}$ " x  $\frac{1}{16}$ " Chequer

No. 114

Solid



Up to 4' 3" x 3' 3"

$\frac{1}{8}$ " Thick min.,  $\frac{1}{2}$ " Thick max.

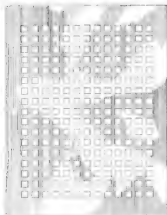
Up to 3' 6" x 2' 7 $\frac{1}{2}$ "

$\frac{1}{8}$ " Thick min.,  $\frac{1}{2}$ " Thick max.

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

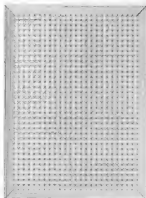
## GRATINGS

No. 900



4' 2½" x 3' 2½"  
(border all round)  
1½" Thick. 1½" Mesh

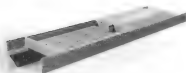
No. 901



3' 10½" x 2' 10½"  
(border all round)  
1½" Thick. 2" Mesh

## CAST-IRON DUCT TRAY COVERS

No. 906



No. 910



Clear Width of Duct	Sizes of Cover
1' 0"	1' 3½" wide x 3' 0" long x 1½" deep
1' 3"	1' 6½" wide x 3' 0" long x 1½" deep
1' 6"	1' 9½" wide x 3' 5½" long x 1½" deep

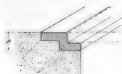
Clear Width of Duct	Sizes of Covers
2' 0"	2' 3½" wide x 2' 3½" long x 4½" deep
2' 9"	3' 0½" wide x 3' 0½" long x 4½" deep
3' 0"	3' 3½" wide x 3' 0½" long x 4½" deep

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW



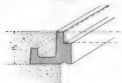
## CURBS FOR TRENCH COVERS

No. 1



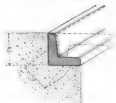
For  $\frac{1}{2}$ " Thick Cover  
4' 3" and 4' 7" Long  
Also 1 1/2" High for 1" Thick Cover  
4' 6" Long

No. 2



For  $\frac{1}{2}$ ",  $\frac{3}{4}$ " and 1" Thick Covers  
4' 2" Long

No. 3

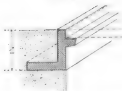


For  $\frac{1}{2}$ ",  $\frac{3}{4}$ ", 1",  $\frac{5}{8}$ ",  $\frac{3}{4}$ ", 2", 1" and  
Thick Cover 4' 0" Long

Also :

For  $\frac{1}{2}$ " Thick Cover 3' 10 1/2" L  
For 1" Thick Cover 4' 8 1/2" L  
For  $\frac{1}{2}$ " Thick Cover 3' 5 1/2" L  
For 1 1/4" Thick Cover 4' 6" L

No. 4



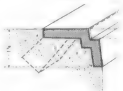
For  $\frac{1}{2}$ " Thick Cover 4' 6" Long  
For  $\frac{3}{4}$ " Thick Cover 4' 0" Long

No. 5



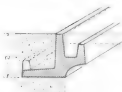
For Tray 1" Deep  
4' 2 1/2" Long

No. 6



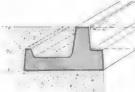
For  $\frac{1}{2}$ " Thick Cover  
4' 0" Long

No. 7



For  $\frac{1}{2}$ " Thick Cover  
4' 6" Long  
Also for  $\frac{3}{4}$ " Thick Cover  
3' 7" and 4' 0" Long

No. 8



For 1" Thick Cover  
3' 1 1/2" Long

No. 9

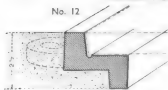


For  $\frac{1}{2}$ " Thick Cover 4' 2 1/2" Long  
For  $\frac{3}{4}$ " Thick Cover 4' 0" Long  
For 1" Thick Cover 4' 2 1/2" Long (L)  
For 1 1/4" Thick Cover 4' 0" Long

**LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW**

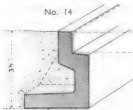
## CURBS FOR TRENCH COVERS

No. 12



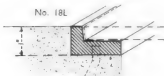
For 1" Thick Cover 5' 0" Long

No. 14



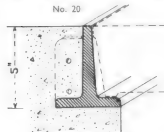
For 1" Thick Cover 6' 6" Long

No. 18L



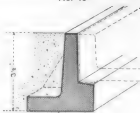
For  $\frac{1}{2}$ " Thick Cover 3' 10 $\frac{1}{2}$ " Long  
Also  $\frac{1}{2}$ " High for  $\frac{1}{2}$ " Thick Cover 4' 6" Long

No. 20



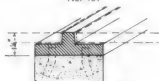
For 4 $\frac{1}{2}$ " Thick Cover 4' 0" Long  
with end flanges for fixing Curbs

No. 13



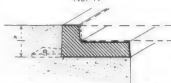
For Tray 2 $\frac{1}{2}$ " Deep 4' 9" Long

No. 18T



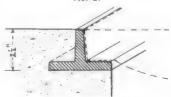
For 1" Thick Cover 4' 6" Long  
Also 2" High for  $\frac{1}{2}$ " Thick Cover 4' 6" Long

No. 19



For  $\frac{1}{2}$ ",  $\frac{3}{4}$ ", 1" and 1 $\frac{1}{2}$ " Thick Covers 4' 0" Long  
Also for  $\frac{1}{2}$ " and 1 $\frac{1}{2}$ " Thick Covers 5' 0" Long

No. 21



For 2" Thick Cover 4' 6" Long

**LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW**

# SURFACE GRATINGS AND PLATES

No. 41  
Hart's Trap



42" x 7" x  $\frac{1}{2}$ " Thick  
52" x 62" x  $\frac{1}{2}$ " Thick  
To suit Pipes  
2½", 3", 3½" and 4" Diam.

No. 105  
Solid Plate



6" x 6" x  $\frac{1}{2}$ " Thick  
6" x 6" x  $\frac{1}{2}$ " Thick  
7½" x 7½" x  $\frac{1}{2}$ " Thick  
8" x 8" x  $\frac{1}{2}$ " Thick  
8" x 8" x  $\frac{1}{2}$ " Thick  
9" x 9" x  $\frac{1}{2}$ " Thick  
9½" x 9½" x  $\frac{1}{2}$ " Thick  
10" x 10" x  $\frac{1}{2}$ " Thick  
11½" x 11½" x  $\frac{1}{2}$ " Thick  
12" x 12" x  $\frac{1}{2}$ " Thick  
15" x 15" x  $\frac{1}{2}$ " Thick  
16" x 10" x  $\frac{1}{2}$ " Thick  
18" x 14" x  $\frac{1}{2}$ " Thick  
18" x 18" x  $\frac{1}{2}$ " Thick  
23" x 13" x  $\frac{1}{2}$ " Thick  
35" x 34" x  $\frac{1}{2}$ " Thick  
36" x 15" x  $\frac{1}{2}$ " Thick

Can also be supplied any  
Size or Shape up to  
8' x 8'

No. 87



3', 4', 4½', 5', 5½', 6',  
6½', 7', 8', 11½', 17½'  
Diam. x  $\frac{1}{2}$ " Thick

Also

6' Diam. x  $\frac{1}{2}$ " Thick  
8½' Diam. x  $\frac{1}{2}$ " Thick  
9' Diam. x  $\frac{1}{2}$ " Thick  
10' Diam. x  $\frac{1}{2}$ " Thick

Also No. 510D  
10½' Diam. x  $\frac{1}{2}$ " Thick  
with six 1½" Deep Legs

No. 56



4" x 4" x  $\frac{1}{2}$ " Thick  
6" x 6" x  $\frac{1}{2}$ " Thick  
7" x 7" x  $\frac{1}{2}$ " Thick  
7½" x 7½" x  $\frac{1}{2}$ " Thick  
8" x 8" x  $\frac{1}{2}$ " Thick  
9" x 9" x  $\frac{1}{2}$ " Thick  
10" x 10" x  $\frac{1}{2}$ " Thick  
10" x 10" x  $\frac{1}{2}$ " Thick  
11" x 11" x  $\frac{1}{2}$ " Thick  
18" x 18" x  $\frac{1}{2}$ " Thick

No. 50



10½" x 10½" x  $\frac{1}{2}$ " Thick

No. 619



6½" x 6½" x  $\frac{1}{2}$ " Thick  
7" x 7" x  $\frac{1}{2}$ " Thick  
7½" x 7½" x  $\frac{1}{2}$ " Thick  
8" x 8" x  $\frac{1}{2}$ " Thick  
9" x 9" x  $\frac{1}{2}$ " Thick  
9½" x 9½" x  $\frac{1}{2}$ " Thick

No. 86



6' Diam. x  $\frac{1}{2}$ " Thick  
7' Diam. x  $\frac{1}{2}$ " Thick  
14½' Diam. x  $\frac{1}{2}$ " Thick

No. 67



7" x 7" x  $\frac{1}{2}$ " Thick  
9" x 9" x  $\frac{1}{2}$ " Thick  
12" x 12" x  $\frac{1}{2}$ " Thick

No. 103



5½" x 6½" x  $\frac{1}{2}$ " Thick  
To suit  
4" Diameter Pipe

No. 694



10" x 10" x  $\frac{1}{2}$ " Thick

To suit 4" Diameter Pipe

No. 118



Section

6" x 6" x  $\frac{1}{2}$ " Thick  
7" x 7" x  $\frac{1}{2}$ " Thick  
8" x 8" x  $\frac{1}{2}$ " Thick  
9" x 9" x  $\frac{1}{2}$ " Thick  
10" x 10" x  $\frac{1}{2}$ " Thick  
12" x 12" x  $\frac{1}{2}$ " Thick

No. 695



9" x 9" x  $\frac{1}{2}$ " Thick

No. 76



3' Diam. x  $\frac{1}{2}$ " Thick  
3½' Diam. x  $\frac{1}{2}$ " Thick  
4' Diam. x  $\frac{1}{2}$ " Thick  
5' Diam. x  $\frac{1}{2}$ " Thick  
6' Diam. x  $\frac{1}{2}$ " Thick  
6½' Diam. x  $\frac{1}{2}$ " Thick  
7' Diam. x  $\frac{1}{2}$ " Thick  
7½' Diam. x  $\frac{1}{2}$ " Thick  
8' Diam. x  $\frac{1}{2}$ " Thick  
9' Diam. x  $\frac{1}{2}$ " Thick  
9' Diam. x  $\frac{1}{2}$ " Thick

No. 78  
Rebated Border



5" x 5" x  $\frac{1}{2}$ " Thick  
6" x 6" x  $\frac{1}{2}$ " Thick  
6" x 6" x  $\frac{1}{2}$ " Thick  
7" x 7" x  $\frac{1}{2}$ " Thick  
8" x 8" x  $\frac{1}{2}$ " Thick  
9" x 9" x  $\frac{1}{2}$ " Thick  
10" x 10" x  $\frac{1}{2}$ " Thick  
12" x 12" x  $\frac{1}{2}$ " Thick

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

# SURFACE GRATINGS AND PLATES

No. 64



4' x 4' x  $\frac{1}{2}$ " Thick  
 4' x 4' x  $\frac{1}{2}$ " Thick  
 6' x 6' x  $\frac{1}{2}$ " Thick  
 6' x 6' x  $\frac{1}{2}$ " Thick  
 7' x 7' x  $\frac{1}{2}$ " Thick  
 7' x 7' x  $\frac{1}{2}$ " Thick  
 7' x 7' x  $\frac{1}{2}$ " Thick  
 8' x 8' x  $\frac{1}{2}$ " Thick  
 8' x 8' x  $\frac{1}{2}$ " Thick  
 8' x 8' x  $\frac{1}{2}$ " Thick  
 9' x 5' x  $\frac{1}{2}$ " Thick  
 9' x 6' x  $\frac{1}{2}$ " Thick  
 9' x 6' x  $\frac{1}{2}$ " Thick  
 9' x 9' x  $\frac{1}{2}$ " Thick  
 9' x 9' x  $\frac{1}{2}$ " Thick  
 9' x 9' x  $\frac{1}{2}$ " Thick  
 10' x 10' x  $\frac{1}{2}$ " Thick  
 10' x 10' x  $\frac{1}{2}$ " Thick  
 10' x 10' x  $\frac{1}{2}$ " Thick  
 11' x 11' x  $\frac{1}{2}$ " Thick  
 11' x 11' x  $\frac{1}{2}$ " Thick  
 12' x 12' x  $\frac{1}{2}$ " Thick  
 12' x 12' x  $\frac{1}{2}$ " Thick  
 14' x 14' x  $\frac{1}{2}$ " Thick  
 15' x 12' x  $\frac{1}{2}$ " Thick  
 6' x 10' x  $\frac{1}{2}$ " Thick  
 18' x 18' x  $\frac{1}{2}$ " Thick  
 23' x 13' x  $\frac{1}{2}$ " Thick  
 27' x 22' x  $\frac{1}{2}$ " Thick  
 30' x 24' x  $\frac{1}{2}$ " Thick  
 36' x 15' x  $\frac{1}{2}$ " Thick

Also with Smaller Holes

6' x 6' x  $\frac{1}{2}$ " Thick  
 7' x 7' x  $\frac{1}{2}$ " Thick  
 8' x 8' x  $\frac{1}{2}$ " Thick  
 9' x 9' x  $\frac{1}{2}$ " Thick  
 12' x 6' x  $\frac{1}{2}$ " Thick

No. 88



18' x 12' x  $\frac{1}{2}$ " Thick

No. 115

Ribbed on Underside



6' x 6' x  $\frac{1}{2}$ " Min. Thick  
 7' x 7' x  $\frac{1}{2}$ " Thick  
 9' x 9' x  $\frac{1}{2}$ " Thick  
 9' x 9' x  $\frac{1}{2}$ " Thick  
 9' x 9' x  $\frac{1}{2}$ " Thick

No. 785



18' x 12' x  $\frac{1}{2}$ " Thick

No. 89



14' x 8' x  $\frac{1}{2}$ " Thick

No. 119



4' Diam. x  $\frac{1}{2}$ " Thick  
 5' Diam. x  $\frac{1}{2}$ " Thick  
 6' Diam. x  $\frac{1}{2}$ " Thick

No. 120



8", 9", 11", 12", 12"  
 and 14" Diam.  
 All  $\frac{1}{2}$ " Thick

No. 104



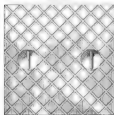
6' x 6' x  $\frac{1}{2}$ " Thick  
 6' x 6' x  $\frac{1}{2}$ " Thick  
 7' x 7' x  $\frac{1}{2}$ " Thick  
 7' x 7' x  $\frac{1}{2}$ " Thick  
 7' x 7' x  $\frac{1}{2}$ " Thick  
 8' x 8' x  $\frac{1}{2}$ " Thick  
 8' x 8' x  $\frac{1}{2}$ " Thick  
 9' x 9' x  $\frac{1}{2}$ " Thick  
 9' x 9' x  $\frac{1}{2}$ " Thick  
 9' x 9' x  $\frac{1}{2}$ " Thick  
 10' x 10' x  $\frac{1}{2}$ " Thick  
 11' x 11' x  $\frac{1}{2}$ " Thick  
 12' x 6' x  $\frac{1}{2}$ " Thick  
 12' x 9' x  $\frac{1}{2}$ " Thick

No. 616



7' x 7' x  $\frac{1}{2}$ " Thick  
 7' x 7' x  $\frac{1}{2}$ " Thick  
 8' x 8' x  $\frac{1}{2}$ " Thick  
 8' x 8' x  $\frac{1}{2}$ " Thick  
 9' x 6' x  $\frac{1}{2}$ " Thick  
 9' x 9' x  $\frac{1}{2}$ " Thick  
 9' x 9' x  $\frac{1}{2}$ " Thick  
 10' x 10' x  $\frac{1}{2}$ " Thick

No. 847



20' x 20' x  $\frac{1}{4}$ " Thick

No. 839

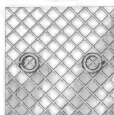


12' x 12' x 1" Thick  
 12' x 12' x  $\frac{1}{2}$ " Thick

Also No. 889

12' x  $\frac{8}{12}$  x 1" Thick  
 12' x  $\frac{12}{12}$  x 1" Thick

No. 848



20' x 20' x  $\frac{1}{4}$ " Thick

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

### SURFACE GRATINGS WITH FRAMES

No. 64



Opening	Crown	Depth	Thickness of Grating
"6" x 6"	8 1/2" x 8 1/2"	1 1/2"	1/2"
"6" x 6"	8 1/2" x 8 1/2"	2 1/2"	1/2"
"6" x 6"	8 1/2" x 8 1/2"	3 1/2"	1/2"
"6" x 6"	9 1/2" x 9 1/2"	2 1/2"	1/2"
"6" x 6"	9 1/2" x 9 1/2"	3 1/2"	1/2"
"6" x 7"	9 1/2" x 10 1/2"	2 1/2"	1/2"
"6" x 8"	10 1/2" x 11 1/2"	2 1/2"	1/2"
"8" x 8"	8 1/2" x 10 1/2"	2 1/2"	1/2"
"8" x 8"	12 1/2" x 12 1/2"	2 1/2"	1/2"
"8" x 8"	12 1/2" x 12 1/2"	3 1/2"	1/2"
"8" x 9"	11 1/2" x 11 1/2"	1 1/2"	1/2"
"8" x 9"	11 1/2" x 11 1/2"	2 1/2"	1/2"
"10" x 10"	12 1/2" x 12 1/2"	1 1/2"	1/2"
"10" x 10"	12 1/2" x 12 1/2"	2 1/2"	1/2"
"10" x 10"	12 1/2" x 12 1/2"	3 1/2"	1/2"
"10" x 10"	14 1/2" x 14 1/2"	1 1/2"	3/4"
"12" x 12"	14 1/2" x 14 1/2"	1 1/2"	3/4"
"12" x 12"	14 1/2" x 14 1/2"	2 1/2"	3/4"
"12" x 12"	14 1/2" x 14 1/2"	3 1/2"	3/4"
"14" x 14"	16 1/2" x 16 1/2"	1 1/2"	3/4"
"16" x 16"	18 1/2" x 18 1/2"	1 1/2"	3/4"
"16" x 16"	21 1/2" x 21 1/2"	2 1/2"	3/4"
"16" x 16"	21 1/2" x 21 1/2"	3 1/2"	3/4"
"20" x 20"	23 1/2" x 23 1/2"	1 1/2"	3/4"
"20" x 20"	23 1/2" x 23 1/2"	2 1/2"	3/4"

Any of these can be supplied with Solid  
Plate Cover as No. 105

\* Also 96 mg/d

No. 64A



Opening	Overall	Depth	Thickness of Grating
8" Diam.	12" Diam.	3"	1/4"
10" Diam.	14" Diam.	2"	3/8"

No. 64C



Opening	Overall	Depth	Thickness of Cover
10" x 10"	14" x 14"	1 1/2"	1/4"
10" x 10"	14" x 14"	2"	1/4"
10" x 10"	16" x 16"	2 1/2"	1/4"
12" x 12"	16" x 16"	2 1/2"	1/4"

No. 50



Opening	Overall	Depth	Thickness of Grating
11" Diam.	14" Diam.	2"	1"
12" Diam.	16" Diam.	2"	1"

No. 73



Opening	Overall	Depth	Thickness in Grating
2½" Diam.	4½" Diam.	6"	4"
6" Diam.	7½" Diam.	11"	4"

No. 64B  
For Buchan's Trap

[illegible]

No. 66



Opening	Overall	Depth	Thickness of Grating
6" Diam.	10" Diam.	3"	1"
8 1/2" Diam.	13" Diam.	3"	1"
11 1/2" Diam.	16" Diam.	3"	1"

<sup>2</sup>Also with Dated Circles.

No. 102



Over Top	Overall	Depth	Thickness of Graving
7" x 7"	10" x 10"	2	1
8" x 8"	11" x 11"	2	1
9" x 9"	12" x 12"	2 1/2	1
10" x 10"	14" x 14"	3 1/2	1

\*Also winged

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# SURFACE GRATINGS WITH FRAMES

No. 133



Opening	Overall	Depth	Thickness of Grating
12" x 12"	15 1/2" x 15 1/2"	3 1/2"	1 1/2"
24" x 24"	31 1/2" x 31 1/2"	3 1/2"	2 1/2"
36" x 36"	47 1/2" x 47 1/2"	4"	3 1/2"
48" x 48"	63 1/2" x 63 1/2"	4"	4 1/2"

No. 126



Opening	Overall	Thickness of Cover
5" Diam.	10" x 10"	1"

No. 133K



Opening	Overall	Depth	Thickness of Grating
24" x 24"	31 1/2" x 31 1/2"	4"	2 1/2"

No. 144

Coal Shoot Frame and Cover



Opening	Overall	Depth	Thickness of Cover
12" diam.	16" diam.	1 1/2"	1"

No. 133L



Opening	Overall	Depth	Thickness of Grating
12" x 24"	14" x 36"	4 1/2"	1 1/2"

No. 621



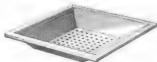
Opening	Overall	Depth	Thickness of Grating
15 1/2" diam.	20" diam.	4"	1" also 1 1/2"

No. 662



Opening	Overall	Depth	Thickness of Grating
10" x 20"	24" diam.	2"	1 1/2"

No. 675



18" x 18" x 8 1/2" x 1" Thick  
Grating (Close and 9" x 9")

No. 682

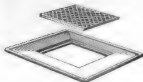


Opening	Overall	Depth	Thickness of Grating
8" x 8"	10" x 10"	2 1/2"	1"

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# SURFACE GRATINGS AND PLATES WITH FRAMES

No. 683



Opening	Overall	Depth	Thickness of Grating
8 1/2" x 8 1/2"	15 1/2" x 15 1/2"	1 1/2"	1"

No. 725



Opening	Overall	Depth	Thickness of Cover
15" x 15"	19 1/2" x 19 1/2"	2 1/2"	5/8"

No. 711



Opening	Overall	Depth	Thickness of Grating
6" Diam.	8 1/2" Diam.	1 1/2"	1"

No. 712



Opening	Overall	Depth	Thickness of Grating
6" Diam.	9" Diam.	6 1/2"	1"

No. 712



Opening	Overall	Depth	Thickness of Grating
6" Diam.	9" Diam.	1 1/2"	1"
9" Diam.	12" Diam.	1 1/2"	1"
9" Diam.	12" Diam.	1 1/2"	1"

No. 712s



Opening	Overall	Depth	Thickness of Cover
6" Diam.	9" Diam.	1 1/2"	1"
9" Diam.	12" Diam.	1 1/2"	1"

No. 743



Opening	Overall	Depth	Thickness of Grating
10 1/2" Diam.	11 1/2" Diam.	1"	1"
12" Diam.	13 1/2" Diam.	1 1/2"	1"

No. 805



Grating	Overall	Thickness
9" x 9"	18" x 18"	1"

No. 808



Grating	Overall	Depth	Thickness of Grating
1/2" x 8 1/2"	16" x 12 1/2"	1"	2"

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## SURFACE GRATINGS WITH FRAMES

**No. 834**  
With Hinged Grating



Grating	Overall	Depth	Thickness of Grating
5" x 5"	32" x 32"	1"	1"

**No. 840**



**No. 870**



Opening	Overall	Depth	Thickness of Grating
6½" x 5½"	12" x 9½"	3"	1"

**No. 892**  
Coal Shoot Frame and Cover



Grating	Overall	Depth	Thickness of Grating
8" x 8"	11½" x 11½"	2½"	½"

**No. 877**



Opening	Overall	Depth of Frame	Thickness of Grating
6" x 6"	38" x 38"	10"	½"

**No. 882**



Opening	Overall	Depth	Thickness of Grating
22" Diam.	4" Diam.	2"	1"

## GREASE BOX COVERS

**No. 121A**  
6½" x 6½" Opening



3½" Deep

**No. 121E**  
6½" x 6½" Opening



4" Deep

**No. 121B**  
With 4" Diam. Outlet



2½" Deep

**No. 121G**  
6½" x 6½" Opening



4" Deep

**No. 121D**  
6½" x 6½" Opening



4" Deep

**No. 121C**  
As above but with 4" Diam. Outlet  
3½" Deep  
13" x 13" Overall x ½" Thick

**No. 121F**  
As above but with 4" Diam. Outlet  
3½" Deep

**No. 121H**  
As above but with 4" Diam. Outlet  
3½" Deep

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## CESSPOOL BOXES

No. 92



No. 758



Outlet on Side or Bottom

No.	Grating	Overall	Depth	Thickness of Grating
92	9 $\frac{1}{2}$ " x 9 $\frac{1}{2}$ "	10 $\frac{1}{2}$ " x 10 $\frac{1}{2}$ "	3 $\frac{1}{2}$ "	1"
758	6 $\frac{1}{2}$ " x 6 $\frac{1}{2}$ "	7" x 7"	3 $\frac{1}{2}$ "	1"

No. 842



Grating	Overall	Depth	Thickness of Grating
9" x 9"	12" x 12"	6"	1"

No. 759



Grating	Overall	Depth	Thickness of Grating
9" x 6"	11 $\frac{1}{2}$ " x 8 $\frac{1}{2}$ "	6 $\frac{1}{2}$ "	1"

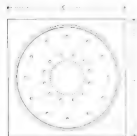
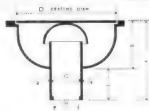
No. 896



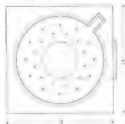
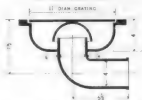
Grating	Overall	Depth	Thickness of Grating
6" x 6"	10" x 10"	3 $\frac{1}{2}$ "	1"

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## BELL-TRAP CESSPOOLS



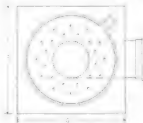
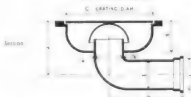
No. 11  
with Bent Spigot Outlet



NOTE.—Inlet Pipes can be supplied for any of these Traps

No. 12 & 15

with Bent Sanitary Faucet Outlet. For dimensions, see Table bottom left.



Dimensions in Inches

No.	A	B	C	D	E	F	G	H
1	3 1/2	3 1/2	2 1/2	5 1/2	6	6	1 1/2	
1	3 1/2	3 1/2	2 1/2	5 1/2	8	8	2	
In brass	2 1/2	2 1/2	2 1/2	2 1/2	3	3	1 1/2	
2	3 1/2	3 1/2	2 1/2	5 1/2	6	6	1 1/2	
3	3 1/2	3 1/2	2 1/2	5 1/2	6	6	1 1/2	
9	6	4	2	11	13	13	4	
10	12	4	8	11	13	13	4	
10	12	4	8	11	18	18	4	
13	6 1/2	4	2 1/2	11	13	13	4	3 1/2
14	6 1/2	3 1/2	3	11	13	13	5 1/2	4 1/2
14A	6 1/2	3 1/2	3	11	13	13	5 1/2	4 1/2
14B	7 1/2	4 1/2	3	14	16	16	7 1/2	7 1/2

### GRATINGS

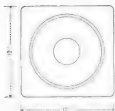
Loose	Hinged	Screwed
No. 1	Nos. 2, 9, 10, 13, 14, 14A & 14B	No. 3

Dimensions in Inches

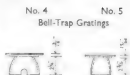
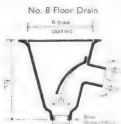
No.	A	B	C	D	E	F	G	H
12	7 1/2	4	1 1/2	13	4	5 1/2	13	13
15	9 1/2	4 1/2	1 1/2	14	6	7 1/2	14	14

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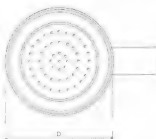
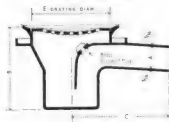
## FLOOR DRAINS AND CESSPOOL TRAPS



B	C	D	B	C	D
4	6	3	6	10	3
4	8	3	6	12	3
4	10	3	6	14	3



**No. 16 Floor Drain**



A	B	C	D	E
3	10	10	11	9 1/2
4	10	10	14	10

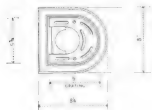
**LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW**

## BALCONY AND ROOF GULLIES

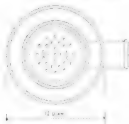
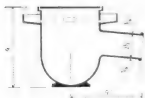
No. 908

C.I. Balcony Gully

Outlet to suit 2½" and 3" Light Rain-Water Pipes.

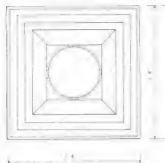
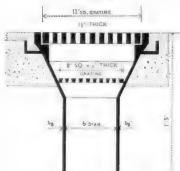


No. 17  
C.I. Roof Gully



No. 909

Roof Gully



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## LEAK-PROOF OUTLETS FOR ASPHALTE

No. 796

1' 11" Diam. x 1' 0" Long Overall  
Grating 9" Diam.  $\frac{1}{4}$ " Thick



For Pipes 2½", 3", 3½", 4", 5" and 6" Diam.  
 $\frac{1}{4}$ " Metal  
Also for No. 1, 4" Diam.

No. 796A

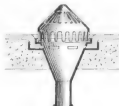
8" Diam. x 1' 0" Long Overall  
Grating 5½" Diam.  $\frac{1}{4}$ " Thick



Outlet up to 4" Diam.  
 $\frac{1}{4}$ " Metal

No. 797

1' 11" Diam. x 1' 0" Long Overall  
Grating 9" Diam.  $\frac{1}{4}$ " Thick



For Pipes 2½", 3", 3½", 4", 5" and 6" Diam.  
 $\frac{1}{4}$ " Metal  
Also for No. 1, 4" Diam.

No. 797A

8" Diam. x 1' 0" Long Overall  
Grating 5½" Diam.  $\frac{1}{4}$ " Thick



Outlet up to 4" Diam.  
 $\frac{1}{4}$ " Metal

No. 816

7½" Diam. Overall. Grating 4½" Diam.  $\frac{1}{4}$ " Thick

with 1½" Short Tail  
for Lead Pipe



with Bent Tail



with 7" Long Straight  
Tail



To suit 2" Diam. Pipes.  $\frac{1}{4}$ " Metal

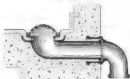
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## LEAK-PROOF OUTLETS FOR ASPHALTE

No. 845

8" Diam. Overall  
Grating  $5\frac{1}{2}$ " Diam.,  $\frac{1}{2}$ " Thick  
(2" to 4" Pipe)

Also 10 $\frac{1}{2}$ " Diam. Overall  
Grating 8" Diam.,  $\frac{1}{2}$ " Thick  
(6" Pipe)



2", 3", 3 $\frac{1}{2}$ " and 4" Diam.,  $\frac{3}{8}$ " Metal  
with Spigot Tail  
10 $\frac{1}{2}$ " Long from Centre of Grating  
Also 6" Diam.,  $\frac{3}{8}$ " Metal  
with Spigot Tail  
14 $\frac{1}{2}$ " Long from Centre of Grating

No. 850

8" Diam. Overall  
Grating  $5\frac{1}{2}$ " Diam.,  $\frac{1}{2}$ " Thick. (2" to 4" Pipe)

Also 10 $\frac{1}{2}$ " Diam. Overall  
Grating 8" Diam.,  $\frac{1}{2}$ " Thick. (6" Pipe)



2", 3", 3 $\frac{1}{2}$ " and 4" Diam.,  $\frac{3}{8}$ " Metal  
with Spigot Tail. 10 $\frac{1}{2}$ " Long from Centre of Grating  
Also 6" Diam.,  $\frac{3}{8}$ " Metal  
with Spigot Tail. 14 $\frac{1}{2}$ " Long from Centre of Grating

No. 849

9 $\frac{1}{2}$ " Diam. x 1' 0" Long  
Overall



To suit 3" Diam. Pipes  
 $\frac{1}{2}$ " Metal

No. 874

6" Diam. x 1" Deep  
Overall  
Grating 4" Diam.,  
 $\frac{1}{2}$ " Thick



No. 875

8" Diam. x 1' 0" Long  
Also 1' 6" Long  
Overall  
Grating 4" Diam.,  
 $\frac{3}{8}$ " Thick



Outlet up to 4" Diam.  
 $\frac{3}{8}$ " Metal

No. 881

6 $\frac{1}{2}$ " Diam. x 1' 0" Long  
Overall  
Hinged Grating  
 $3\frac{1}{2}$ " Diam.



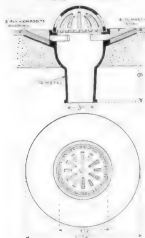
To suit Pipe 4" Diam.  
 $\frac{1}{2}$ " Metal

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## LEAK-PROOF OUTLETS FOR ASPHALTE

No. 883

1' 12" Diam. Overall  
Grating 6 1/2" Diam. 1/2" Thick

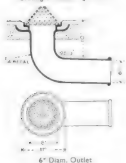


9" Long. 3" and 6" both with Bead to suit B.S.S. M.H. or E.H. Pipes.

8 1/2" Long. 2", 2 1/2", 3 1/2" and 4" all with Bead to suit B.S.S. M.H. or E.H. Pipes.

No. 888

11" Diam. Overall  
Grating 8" Diam. 1/2" Thick



6" Diam. Outlet

No. 886

9" x 9" Overall  
Grating 6 1/2" x 6 1/2" - 1 1/4" at Centre and 1/2" at edge



9" Long 4" Diam.

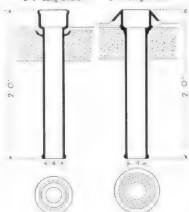
## LEAK-PROOF VENT PIPES FOR ASPHALTE ROOF

No. 894

2' 0" Long Overall

No. 895

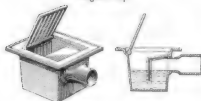
2' 0" Long Overall



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## TRAPS

No. 4  
Regent Trap



Overall	Grating	Thickness of Grating
10" x 10" x 6 1/2" Deep	6" x 6" Hinged	1"
12" x 12" x 7 1/2" Deep	8" x 8" Hinged	1"
15" x 15" x 9" Deep	10" x 10" Loose	1"
18" x 18" x 13" Deep	12" x 12" Loose	1"

No. 3  
Gully Trap  
with 10" x 10" Loose Grating



No. 818 S-Trap  
3" Diam.  
with 5" Diam. Grating  
1/2" Thick



No. 818 P-Trap  
2" Diam. 90  
with 4" Diam. Grating  
1/2" Thick



S-Trap  
with 6" Hinged Grating



FIG. 69

P-Trap  
with 6" Hinged Grating



FIG. 71

Flat-Bottomed  
S-Trap  
with 4 1/2" Hinged Grating



FIG. 70

Flat-Bottomed  
P-Trap  
with 4 1/2" Hinged Grating



FIG. 72

No. 815 P-Trap  
2" Diam. 115  
with 5" Diam. Grating  
1/2" Thick



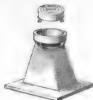
No. 786  
Rain-Water Gully Inlet  
9" x 9" x 9" Deep  
with 8" x 8" Grating 1/2" Thick





## STOP COCK CASES

No. 1



Overall	Clear Opening
105" x 105" x 95" Deep	31" Diam.

No. 2



Overall	Clear Opening
6" x 6" Deep	4" Diam.
6" x 6" Deep	4" Diam.
9" x 9" Deep	6" Diam.
9" x 9" Deep	6" Diam.
15" x 15" Deep	12" Diam.

No. 3



Overall	Clear Opening
7" x 7" x 6" Deep	5" x 5"
8" x 8" x 8" Deep	6" x 6"

No. 4



Nominal Size	Overall	Clear Opening
6" x 6" x 7" Deep	7" x 7"	5" x 5"
8" x 8" x 7" Deep	9" x 9"	7" x 7"
10" x 10" x 6" Deep	11" x 11"	8" x 8"

\*Also with Chained Cover

No. 5



Overall	Clear Opening
9 1/2" Diam. x 8" Deep	3 1/2" Diam.

No. 6



Overall	Clear Opening
9" Diam. x 7 1/2" Deep	3 1/2" Diam.

No. 10



Top can be supplied either Hinged or Chained

Overall	Clear Opening
4 1/2" x 4 1/2" x 3 1/2" Deep	4 1/2" x 4 1/2"
7" x 7" x 4" Deep	4 1/2" x 4 1/2"
6 1/2" x 7" x 3 1/2" Deep	4 1/2" x 4 1/2"
7" x 7" x 4" Deep	4 1/2" x 4 1/2"
7 1/2" x 7 1/2" x 4 1/2" Deep	5 1/2" x 5 1/2"
9 1/2" x 9 1/2" x 5" Deep	5 1/2" x 5 1/2"
9 1/2" x 9 1/2" x 5" Deep	5 1/2" x 5 1/2"
10 1/2" x 10 1/2" x 5 1/2" Deep	6" x 6"
11" x 11" x 6" Deep	6" x 6"
11" x 11" x 6" Deep	6" x 6"

No. 7



Overall	Clear Opening
4 1/2" x 5" x 2 1/2" Deep	3 1/2" x 3 1/2"

No. 8



Overall	Clear Opening
7 1/2" x 6" x 2 1/2" Deep	5 1/2" x 4 1/2"

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## STOP COCK CASES

No. 12



Overall	Clear Opening
6½" x 1" Deep	4½" Diam.

No. 13



Overall	Clear Opening
7" x 7" x 2½" Deep 7½" x 7½" x 3½" Deep 12" x 10" x 5½" Deep	3½" x 3½" 4" x 3½" 6" x 6"

No. 14



Overall	Clear Opening
12" x 12" x 9" Deep	3½" Diam.

No. 15



Overall	Clear Opening
10½" Diam. x 10½" Deep 9" Diam. x 3½" Deep	4½" Diam. 4"

No. 16



Overall	Clear Opening
10" Diam. x 9" Deep	4" Diam.

No. 17



Overall	Clear Opening
8" x 8" x 8" Deep	3½" x 3½"

No. 18



Overall	Clear Opening
7½" x 7" x 4½" Deep	4½" x 4½"

No. 19



Overall	Clear Opening
8" x 6½" x 2½" Deep	5½" x 3½"

No. 21



Overall	Clear Opening
8" x 8" x 3½" Deep	4½" x 4½"

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## STOP COCK CASES

No. 22

Adjustable Road Surface Box



General View  
with Three Packing  
Rings



Section  
showing application  
of Packing Rings  
Sizes



General View  
without  
Packing Rings

10" Diameter x 9" High Overall; 3½" Diameter Clear Opening

Can be made to other Sizes and Shapes to Order

By the insertion of one or more Packing Rings the Cover can be raised to suit  
New Surface Level of Road without disturbing the Box.

## STOP COCK AND VALVE CASES

No. 24



No.	Overall	Clear Opening
24	9" Diam. x 8½" Deep	3½" Diam.

No. 25



No.	Overall	Clear Opening
25	14½" Diam. x 16" High	3½" Diam.

No. 26



No.	Overall	Clear Opening
26	14½" Diam. x 12" Deep	3½" Diam.

No. 27



No.	Overall	Clear Opening
27	14½" Diam. x 8½" Deep	3½" Diam.

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## MANHOLE FRAMES AND COVERS



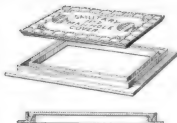
No. 1

Air-Tight Double Seal

Opening	Overall	Depth	Thickness of Cover	
			Over Chequer	Under Chequer
18" x 10 1/2"	24" x 17 1/2"	2"	5/8"	5/8"
22" x 16 1/2"	29 1/2" x 23 1/2"	2"	1"	1"

No. 2

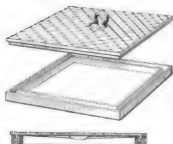
Air-Tight Single Seal



Opening	Overall	Depth	Thickness of Cover	
			Over Chequer	Under Chequer
11" x 11"	15 1/2" x 15 1/2"	2"	1"	1"
20" x 13"	25" x 17 1/2"	2"	1"	1"
20" x 14"	26 1/2" x 20 1/2"	2"	1 1/8"	1 1/8"
22" x 16"	26 1/2" x 20 1/2"	2"	1"	1"
22" x 18"	28 1/2" x 25"	2"	1 1/8"	1 1/8"
24" x 12"	30 1/2" x 16 1/2"	2"	1"	1 1/8"
24" x 12"	29 1/2" x 17 1/2"	2 1/2"	1 1/8"	1 1/8"
24" x 16"	33" x 21 1/2"	2 1/2"	1"	1"
25" x 19"	30" x 24"	2"	1"	1"

No. 3

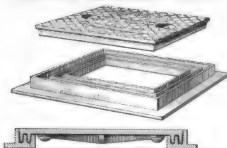
Air-Tight Single Seal



Opening	Overall	Depth	Thickness of Cover	
			Over Chequer	Under Chequer
20 1/2" x 20 1/2"	24" x 24"	1 1/2"	1"	1"

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## MANHOLE FRAMES AND COVERS

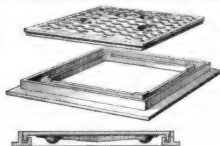


No. 4—Air-Tight Double Seal

Opening	Overall	Depth	Thickness of Cover	
			Over Chassis	Under Chassis
24" x 18"	34" x 28"	8½"	1"	1"

No. 5 similar to No. 4, but lighter

Opening	Overall	Depth	Thickness of Cover	
			Over Chassis	Under Chassis
24" x 18"	31½" x 25½"	2½"	1"	1"



No. 6—Air-Tight Single Seal

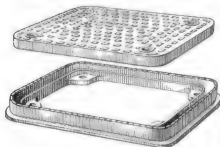
Opening	Overall	Depth	Thickness of Cover	
			Over Chassis	Under Chassis
12" x 12"	18" x 18"	2½"	1"	1"
18" x 18"	21½" x 21½"	2½"	1"	1"
18" x 18"	22½" x 22½"	2½"	1"	1"
18" x 18"	23" x 23"	2½"	1"	1"
20" x 20"	26" x 26"	2½"	1"	1"
24" x 18"	27" x 21"	2½"	1"	1"
24" x 18"	27½" x 21½"	2½"	1"	1"
24" x 18"	30" x 24"	2½"	1"	1"
24" x 18"	30" x 24"	2½"	1"	1"
24" x 24"	30" x 30"	2½"	1"	1"
24" x 24"	30½" x 30½"	2½"	1"	1"
30" x 24"	36" x 30"	2½"	1"	1"

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## MANHOLE FRAMES AND COVERS

No. 7

With Rubber Joints and Gunmetal Screws



Lifting Key

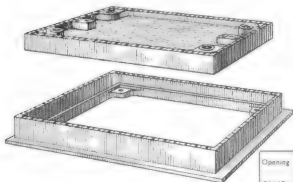


Opening	Overall	Depth	Thickness of Cover	
			Over Chequer	Under Chequer
24"x18"	28½"x22½"	2½"	⅞"	⅞"
30"x24"	34½"x28½"	2½"	⅞"	⅞"

No. 8

With Rubber Joints and Gunmetal Screws

Top prepared for Asphaltic filling



Lifting Key



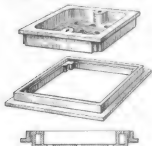
Opening	Overall	Depth	Thickness of Cover
24"x18"	29½"x24"	3½"	⅞"
36"x24"	41½"x29½"	3½"	⅞"

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## MANHOLE FRAMES AND COVERS

No. 13

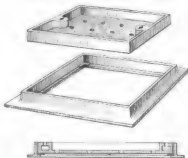
Cover prepared for Asphaltic Filling



Opening	Overall	Depth	Thickness of Cover
18" x 18"	23½" x 23½"	3"	1"

No. 14

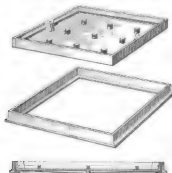
Cover prepared for Asphaltic Filling



Opening	Overall	Depth	Thickness of Cover
24" x 18"	28" x 22"	2½"	1"

No. 15

Cover prepared for Asphaltic Filling



Opening	Overall	Depth	Thickness of Cover
34" x 34"	37½" x 37½"	3½"	1"

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

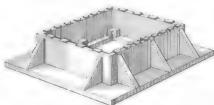
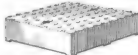
No. 914

B.S.S. Light Manhole Frame and Cover  
to B.S. 437—1933

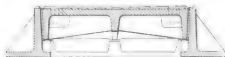
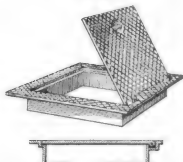


Opening	Overall	Depth	Thickness of Cover	
			Over Chisquer	Under Chisquer
24" x 24"	28" x 28"	1 1/2"	4"	5"

No. 757



No. 700



Opening	Overall	Depth	Thickness of Cover	
			Over Chisquer	Under Chisquer
18" x 18"	33" x 33"	4"	4"	5"

Opening	Overall	Depth	Thickness of Cover	
			Over Chisquer	Under Chisquer
24" x 18"	40" x 34"	9 1/2"	12"	12"

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW



## Unit consisting of End and Side Frames and Covers

No. 916

Cover Machined  
on this fillet for full length!



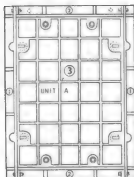
### SPECIFICATION

- LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## MANHOLE FRAME AND COVER

Unit consisting of End and Side Frames and Covers

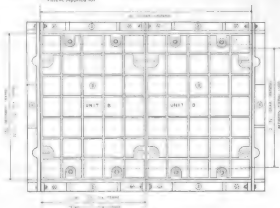
Patent Applied for



1 Unit Type A

Unit A consists of

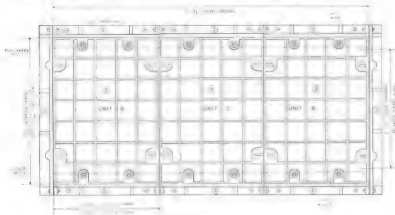
- 2 End Frames Mkd. 1
- 2 Side Frames Mkd. 2
- 1 Cover Mkd. 3



2 Units Type B

Unit B consists of

- 1 End Frame Mkd. 1
- 2 Side Frames Mkd. 2
- 1 Cover Mkd. 3



3 Units (& Over)

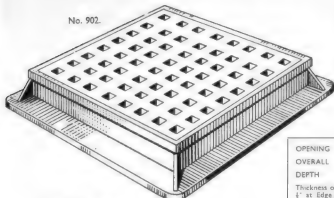
- Comprising : 2 Units Type B. 1 or more Units Type C  
 Unit B as above Unit C consists of no End Frames Unit B as above  
 2 Side Frames, Mkd. 2. 1 Cover, Mkd. 3

Can be supplied in any number of Units from one upwards

**LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW**

## MANHOLE FRAME AND COVER

No. 902.



OPENING	42" x 42"
OVERALL	52½" x 52½"
DEPTH	10"
Thickness of Grating Cover ½" at Edge x 5" at Centre	

No. 905. Fire Hydrant Box



Opening	Overall	Depth	Thickness of Cover
16½" x 10½"	20½" x 14½"	5"	½" o/c ½" u/c

No. 789. Fire Plug Box



Overall	Opening
16½" x 14½" x 9" Deep	11½" x 9"
18½" x 16" x 8½" Deep	13½" x 11"

Manhole Step Irons  
9" Wall Hold

No. 1



15½" x 5"

No. 2



16" x 6"

No. 790. Fire Plug Box



Overall	Clear Opening
24" x 18½" x 8½" Deep	18½" x 13½"

With Chained Cover.

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## CISTERN BRACKETS

No. 50



Sizes

Top	Back
5" x 7"	
6" x 9"	
7" x 9½"	
7½" x 10"	
8" x 10"	
8½" x 7"	
8½" x 11"	
8½" x 10"	
9½" x 12"	
10" x 12"	
12" x 12"	

No. 71



Sizes

Top	Back
8" x 10"	
8½" x 11½"	
9" x 9"	
10" x 12"	
10½" x 10"	
10½" x 12"	
10½" x 11½"	
11" x 10"	
12" x 12"	
12½" x 11½"	

No. 77



Sizes

Top	Back
6½" x 6½"	
6½" x 7½"	

No. 84



Sizes

Top	Back
7½" x 9½"	
9" x 9½"	
10" x 9½"	

No. 102



Size

Top	Back
7½" x 9½"	

No. 153



Sizes

Top	Back
7" x 7"	
8½" x 7"	

No. 158



Size

Top	Back
10" x 8"	

No. 161



Size

Top	Back
8" x 8"	

No. 173



Size

Top	Back
8" x 8"	

## CANTILEVER BRACKETS FOR TUB AND SINK

No. 156



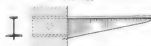
1' 4", 1' 6" and 1' 8" Projection  
4½" Wall Hold

No. 156R



1' 4", 1' 6" and 1' 8" Projection  
4½" Wall Hold

No. 168



1' 3½" Projection  
6" Wall Hold

No. 157



1' 4" and 1' 5½" Projection  
4½" Wall Hold

No. 157R



1' 4" and 1' 5½" Projection  
4½" Wall Hold

**LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW**

## WRINGER PLATES

No. 4

1' 8½" Long



Also No. 6 similar to No. 4  
1' 3" Long

No. 4J

1' 8½" Long



No. 7

1' 9" Long



No. 8

1' 7½" Long



No. 9

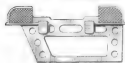
1' 9½" Long



No. 9C

1' 9½" Long

With Tub Clips cast on



No. 10

1' 7" Long



No. 11

1' 7" Long



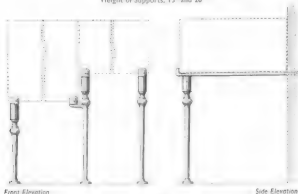
LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## PILLAR-LEG SUPPORTS AND BEARERS FOR COMBINATION TUB AND SINK

No. 154

(with M.S. Bearer)

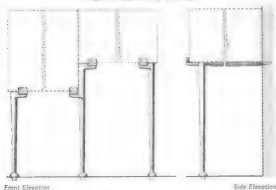
Height of Supports, 15" and 20"



No. 155

(with C.I. Bearer)

Height of Supports, 15½" and 20½"



No. 155 can also be supplied with Pillar-Leg and broad Centre Bearer to suit Double Tubs.

Sink Bearers supplied, 16", 18" or 20" projection.

Bearers can be supplied Recessed for Waste, also for Screwing to Wall.

**LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW**

## CAST-IRON STAIR STEPS

No. 50



Length	Tread	Length	Tread	Length	Tread
1' 6"	3'	2' 6"	3'	3' 0"	10'
1' 6"	6"	2' 8"	8"	3' 6"	10'
2' 0"	10"	2' 6"	10"	4' 0"	10'
2' 3"	10"	2' 9"	8"		
2' 4½"	3'	2' 9"	10"		

Tread  $\frac{1}{16}$ " Thick  
With  $\frac{3}{4}$ " sq. perforations

No. 51



Length	Tread	Riser	Length	Tread	Riser
2' 0"	9"	7½"	3' 0"	10"	7½"
2' 3"	10"	7½"	3' 6"	10"	7½"
2' 6"	10"	7½"	4' 0"	10"	7½"
2' 9"	10"	7½"			

Tread  $\frac{1}{16}$ " Thick  
With  $\frac{3}{4}$ " sq. perforations

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## CAST-IRON STAIR STEPS

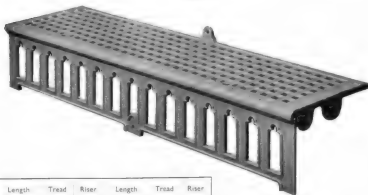
No. 54



Length	Tread	Length	Tread	Length	Tread
2' 0"	10"	3' 0"	10"	4' 0"	10"
2' 3"	10"	3' 6"	10"	4' 0"	11"
2' 6"	10"	3' 6"	11"	4' 6"	10"

Tread  $\frac{1}{2}$ " Thick  
With  $\frac{1}{2}$ " sq. perforations

No. 55



Length	Tread	Riser	Length	Tread	Riser
2' 0"	10"	7 $\frac{1}{2}$ "	3' 6"	10"	7 $\frac{1}{2}$ "
2' 3"	10"	7 $\frac{1}{2}$ "	3' 6"	11"	7 $\frac{1}{2}$ "
2' 6"	10"	7 $\frac{1}{2}$ "	3' 6"	12"	7 $\frac{1}{2}$ "
2' 6"	12"	7 $\frac{1}{2}$ "	4' 0"	10"	7 $\frac{1}{2}$ "
2' 9"	10"	7 $\frac{1}{2}$ "	4' 3"	9 $\frac{1}{2}$ "	7 $\frac{1}{2}$ "
3' 0"	10"	7 $\frac{1}{2}$ "	4' 6"	10"	7 $\frac{1}{2}$ "

Tread  $\frac{3}{4}$ " Thick  
With  $\frac{1}{2}$ " sq. perforations

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

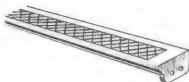


## CAST-IRON STAIR STEPS



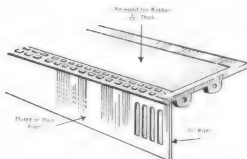
No. 21

Length	Tread	Thickness
1' 10"	8"	1" U.C. 5" D.C.
3' 9"	8"	1" U.C. 1" D.C.
2' 11"	10"	1" U.C. 1" D.C.
2' 11"	9"	1" U.C. 1" D.C.
3' 5"	8"	1" U.C. 1" D.C.



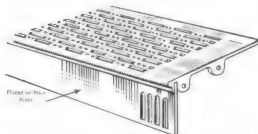
No. 23

Length	Tread	Thickness
1' 5"	8"	1"
2' 6"	4"	1"
1' 2"	4"	1"



No. 69

Length	Tread	Thickness
2' 11"	9 1/2"	1 1/2"



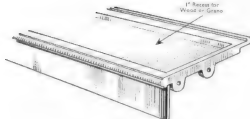
No. 73

Length	Tread	Riser	Thickness
2' 0"	10"	4 1/2"	1" U.C. 1" D.C.
2' 6"	10"	6 1/2"	
2' 9"	8"	8 1/2"	
3' 0"	10"	8 1/2"	
3' 6"	10"	6 1/2"	1" U.C. 1" D.C.
4' 0"	10"	6 1/2"	
1' 6"	12"	7"	1" U.C.
6' 0"	10 1/2"	7"	1 1/2" D.C.

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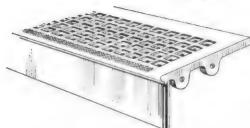
## CAST-IRON STAIR STEPS

No. 73R



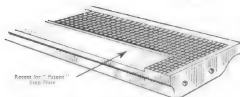
LENGTH	TREAD	RISER
4'-0"	10"	6"
3'-6"	11"	6"

No. 82



LENGTH	TREAD	RISER
4'-0"	10"	9"
4'-0"	10"	6"

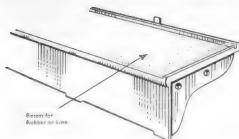
No. 90



LENGTH	TREAD	THICKNESS
3'-0"	10"	1 1/2"
4'-0"	10"	1 1/2"

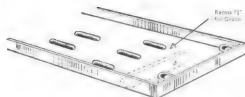
LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## CAST-IRON STAIR STEPS



No. 91

LENGTH	TREAD	RISER	THICKNESS
3' 6"	9"	7½"	5"



No. 92

LENGTH	TREAD
4' 0"	1' 0"



No. 93

LENGTH	TREAD	THICKNESS
2' 6"	10"	1"
3' 0"	10"	1"

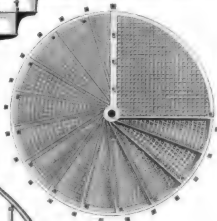
LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

# SPIRAL STAIR

No. 5

SIZES			
Radius Overall	Clear Width	Tread	Riser
1' 6"	1' 3 1/2"	11"	9"
1' 9"	1' 4 1/2"	11"	8"
1' 0"	1' 7 1/2"	1' 0"	8"
1' 3"	1' 10 1/2"	1' 1"	8"
2' 0"	2' 1 1/2"	1' 1"	8"
2' 3"	2' 4 1/2"	1' 1"	8"
3' 0"	2' 7 1/2"	1' 1"	8"

Supplied to any Height  
Right-Hand or Left-Hand Wheel  
Illustration shows Left-Hand Wheel

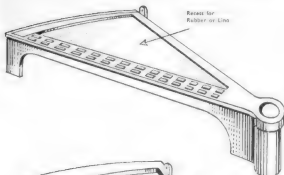


## NOTE

Can be supplied with C.I. Balusters  
as shown, or with  $\frac{1}{2}$  square M.S.  
Balusters.

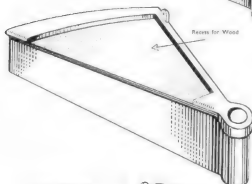
LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## CAST-IRON SPIRAL STAIR STEPS



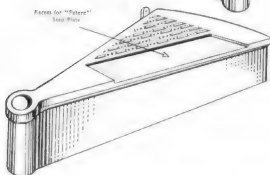
No. 66

Radius	Tread	Riser	Newel
2' 9"	1' 1"	7 1/2"	2' 8 1/2"



No. 86

Radius	Tread	Riser	Newel
2' 6"	1' 3 1/2"	8"	2' 10 1/2"



No. 87

Radius	Tread	Riser	Newel
2' 6"	1' 1"	8"	2' 5 1/2"

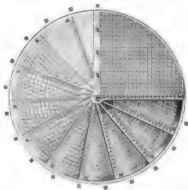
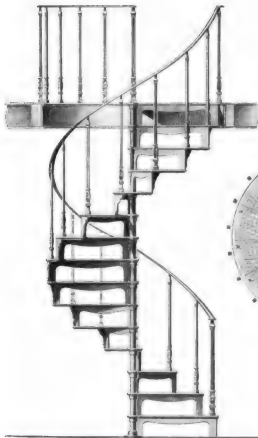
LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

# SPIRAL STAIR

No. 56

SIZES			
Radius Overall	Clear Width	Tread	Riser
1' 9"	1' 5"	0' 11"	8"
2' 0"	1' 8"	1' 0"	8"
2' 3"	1' 11"	1' 1"	8"
2' 6"	2' 1"	1' 1"	8"
2' 9"	2' 4"	1' 1"	8"
3' 0"	2' 7 1/2"	1' 1"	8"

Supplied to any Height,  
Right-Hand or Left-Hand Wheel  
Illustration shows Left-Hand Wheel



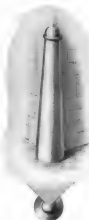
## ROAD AND GUARD POSTS

No. 5  
6" x 8" at Base  
Height 3' 7"



Root 2' 0" Deep

No. 6\*  
For Corner  
10" Diam. at Base  
Height 4' 0"



Plan

No. 7  
1' 1 1/2" Diam. at Base  
Height 4' 0"



Root 2' 0" Deep

No. 8\*  
For Corner  
9" Diam. at Base  
Height 2' 0"



Plan

\*Can be supplied also as self-standing guard posts

## RAIL STANDARDS

No. 377  
3 1/2" x 1 1/2" x 3' 0"



Rails 1 1/2" Diam.

No. 612  
1 1/2" x 3' 1 1/2"



Rails 1 1/2" Diam.

No. 338  
2 1/2" x 3' 3"



Rails 1 1/2" Diam.

No. 343  
1 1/2" x 3' 3"



Rails 1 1/2" Diam.

No. 489  
3 1/2" x 3' 3"



With No. 4 Chain  
Other Heights up to  
4' 5" to Order

No. 623  
2" x 3' 6"



With Loose Bottom  
Socket 5" Deep  
Can be supplied with  
Flange or Base in lieu of  
Socket to Order

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

# BOLLARD

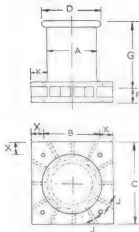
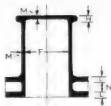
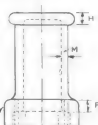
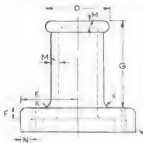


FIG. 73

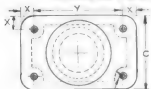


A	B	C	D	E	F	G	H	J	K	L	M	N	X
in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
18	21	30	20	6	16	24	2	$\frac{1}{2}$	6	$1\frac{1}{2}$	1	$4\frac{1}{2}$	$4\frac{1}{2}$

## BOLLARD (B.S.S.) SINGLE TYPE



Where there is no wood deck, fitting strip to be  $\frac{1}{4}$  in. deep for Bollards sizes 4 to 9, and  $\frac{1}{2}$  in. deep for Bollards sizes 10 to 18. Where fitted in way of wood deck, depth to suit thickness of same.



Radius Twice Diam. of Bolt.

FIG. 74

SEE TABLE FOR SIZES WHERE  
APPLICABLE

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# BOLLARDS (B.S.S.) DOUBLE TYPE

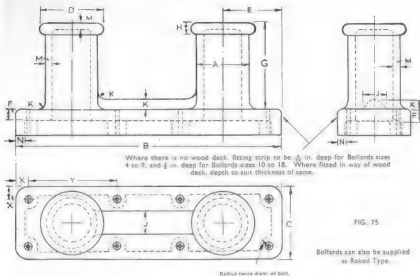


FIG. 75

Bollards can also be supplied as Raised Type.

Radius twice diam. of bolt.

TABLE 35  
DIMENSIONS OF VERTICAL TYPE BOLLARDS

B.S. Item Number	Size of Chain Cables		Size of Bollard A	B	C	D	E	F	G	H	Web		M	N	Rivets (Trans)		Spacing of Rivets		
	in.	in.	in.	ft. in.	in.	in.	in.	in.	in.	in.	J	K	in.	in.	No.	Dist.	X	Y	
B.S.S. B 171	1 1/2	to 1 1/2	4	1 9	6	5	4 1/2	1	7 1/2	1	2	2	3	3	4	in.	in.	in.	
B.S.S. B 172	1 1/2	to 1 1/2	5	2 2 1/2	7 1/2	6 1/2	5 1/2	1 1/2	9 1/2	1 1/2	2 1/2	3	3 1/2	4	4	in.	1 1/2	1 1/2	
B.S.S. B 173	1 1/2	to 1 1/2	6	2 7 1/2	9	7 1/2	6 1/2	1 1/2	11 1/2	1 1/2	3	1 1/2	3 1/2	4	6	in.	1 1/2	10 1/2	
B.S.S. B 174	1 1/2	to 1 1/2	7	3 1	10 1/2	8 1/2	7 1/2	1 1/2	13 1/2	1 1/2	3 1/2	1 1/2	3 1/2	4	6	in.	1 1/2	12 1/2	
B.S.S. B 175	1 1/2	to 1 1/2	8	3 6	12	10	9	2	15 1/2	2	4	1 1/2	3 1/2	4	6	in.	1 1/2	2	14
B.S.S. B 176	1 1/2	to 1 1/2	9	3 11 1/2	13 1/2	11 1/2	10 1/2	2 1/2	16 1/2	2 1/2	4 1/2	1 1/2	3 1/2	4	6	in.	1 1/2	2 1/2	15 1/2
B.S.S. B 177	1 1/2	to 1 1/2	10	4 4 1/2	15	12 1/2	11 1/2	2 1/2	18 1/2	2 1/2	5	2	1 1/2	3 1/2	8	in.	2 1/2	17 1/2	
B.S.S. B 178	2	to 2 1/2	11	4 9 1/2	16 1/2	13 1/2	12 1/2	2 1/2	20 1/2	2 1/2	5 1/2	2 1/2	1 1/2	3 1/2	8	in.	2 1/2	19 1/2	
B.S.S. B 179	2 1/2	to 2 1/2	12	5 3	18	15	13 1/2	3	22 1/2	3	6	2 1/2	1 1/2	3 1/2	8	in.	3	21	
B.S.S. B 180	2 1/2	to 2 1/2	14	6 1 1/2	21	17 1/2	15 1/2	3 1/2	26 1/2	3 1/2	7	2 1/2	2 1/2	3 1/2	10	in.	3 1/2	24 1/2	
B.S.S. B 181	2 1/2	to 3 1/2	16	7 0	24	20	18	4	30 1/2	4	8	3 1/2	2 1/2	3 1/2	10	in.	4	28	
B.S.S. B 182	3 1/2	to 3 1/2	18	7 10 1/2	27	22 1/2	20 1/2	4 1/2	33 1/2	4 1/2	9	3 1/2	2 1/2	3 1/2	12	in.	4 1/2	31 1/2	

"A" is the nominal size of Bollard.

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

## LAMP PILLARS

No. 164

10' 7½" High  
Also 12' 7½" High  
Spigot 2½" Diam. x 2½" High



No. 166

10' 0" High  
With Door in Base  
Spigot 2½" Diam. x 2½" High



No. 167

11' 0" High  
Also 13' 0" High  
With Door in Base  
Spigot 2½" Diam. x 2½" High



No. 157

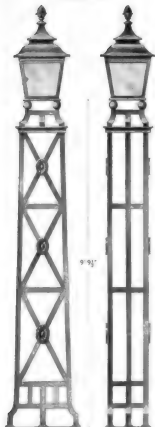
3' 4" High



Base 11½" Square

# LAMP PILLARS

No. 173  
9' 9½" High



Front View

Side View

9' 9½"

No. 915



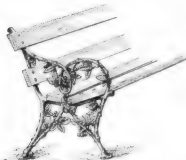
8' 5"

8' 5" High  
with 15" x 7" Base  
Also with 15" x 15" Base

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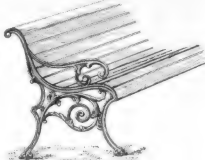
## GARDEN AND PARK SEAT STANDARDS

No. 8



1' 10½" x 2' 8" High Overall

No. 73



2' 2" x 2' 7½" High Overall

No. 89

1' 11" x 2' 8"  
High Overall



No. 2

1' 5" x 2' 9½"  
High Overall

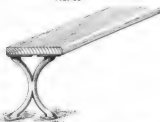


No. 79



1' 2½" x 1' 4½" High Overall

No. 88



1' 0" x 1' 3½" also 1' 0" x 1' 2" High Overall

LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

# Cast-Iron Keel Blocks



Keel Blocks for No. 4 Dry Dock for Messrs Swan, Hunter & Wigham-Richardson Ltd., Wallsend-on-Tyne. Dimensions of Dock: 715 ft. long, 105 ft. wide, 38 ft. deep at H.W.O.S.T.

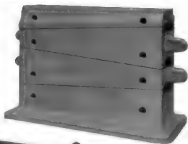
Consulting Engineers: T. F. Burns & Partners, London and Newcastle-on-Tyne.

Main Civil Engineering Contractors: Sir Robert McAlpine & Sons (Newcastle-on-Tyne) Ltd.

Photograph illustrates some of the many sets of Keel Blocks supplied to the Mersey Docks and Harbour Board, Liverpool.

*Reproduced by Courtesy of the Board.*

Slide and Guide Rails for Dockyard Doors.



**LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW**

CAST-IRON BUBBLE TRAY

ASSEMBLY & COMPONENT  
PARTS



LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW



Typical Oil Bubble Trays with  
Bubble Caps and Risers  
as supplied to the Oil & Petroleum  
Industry.



Convector End Tube Support.

**LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW**



Lothian House,  
Lothian Road,  
Edinburgh.

Architects :  
Messrs Stewart, Kaye & Partners

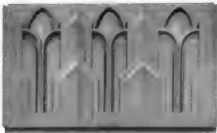


LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW



**ORNAMENTAL AND "MOTIF"  
CAST-IRON BUILDING FRONT PANELS**

As supplied and erected on the façade of a city building



**LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW**



(Above)  
88' 0" long x 5' 9" wide Shelter, Rothessy.

(Right)  
15' 3" long Enclosed Bus Shelter designed by David Mellor, Des. R.C.A., and approved by the Council of Industrial Design.



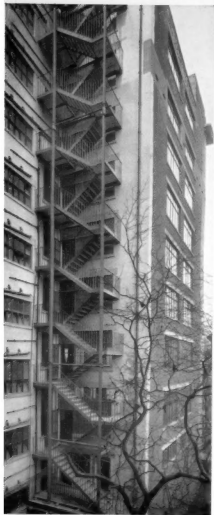
(Above)  
40' 0" long Enclosed type Shelter at the Glaxo Works, Barnard Castle, Co. Durham.

(Right)  
15' 3" long Cantilever Shelter designed by David Mellor, Des. R.C.A., and approved by the Council of Industrial Design.



**LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW**

# TYPICAL IRON FIRE-ESCAPE STAIRS



LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW

**SPIRAL STAIRS AND GANGWAYS TO OIL STORAGE TANKS**

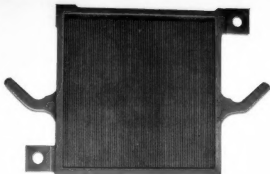


**LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW**

## HIGH-GRADE CASTINGS



C.I. Machine Frame  
6' 4" High x 3' 8" Wide Overall x 2" Deep



C.I. Filter Press Plate  
2' 11" x 2' 11" x 1 1/2" Thick



C.I. Flange  
2 1/2" Bore x 7 1/2" Diam. x 1 1/2" Thick



C.I. Wheel  
12 3/4" Diam. x 1 1/2" Thick

A selection from the  
wide range of high-grade  
castings made for the engineering  
industry, from our own or  
customers' patterns.



C.I. Gear Box  
16 1/2" x 14 1/2" x 14 1/2" Overall

**LION FOUNDRY CO. LTD., KIRKINTILLOCH, NEAR GLASGOW**

